

The Art, the Craft and the Mart - of Medicine

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The Ancient Art of Medicine

In the latter part of the 19th century, Sir William Osler, founder Professor of Medicine at Johns Hopkins Hospital, and recognized as one of the greatest medical teachers of all time stated, and I quote:

“The practice of medicine is an art, not a trade; not a business; but a calling in which your heart will be exercised equally with your head. Often the best part of your work will have nothing to do with potions and powders, but with the exercise of an influence of the strong upon the weak, of the righteous upon the wicked, of the wise upon the foolish.”

My message today deals with the transformation that has taken place in the practice of medicine (in this hallowed art of medicine??) in the recent past. Up to the mid-20th century where the physician was the principal decision maker and the foundation of the medical profession. Today the medical pendulum has swung to the other extreme where medical technology has re-defined **the art of patient care.**

Is it redefining us by redirecting our focus, by altering the way we view patients and their illnesses?

Has modern technology pushed into second place the doctor patient relationship - the human touch, our concern and empathy, and dialogue with our patients?

The Science of Medicine

Scientific study in medicine, has a long and noble history based on the need to solve clinical problems.

The invention of the stethoscope (1816), the microscope, Roentgen's x rays (1895), Curie's study of radium, Harvey's description of the circulation, and Koch's discovery of microbes were classic advances. Indeed, the stethoscope was the first technology to be interposed between the patient and his physician; but these early inventions were used as mere tools to help the physician make a considered diagnosis based on his own experience and expertise.

The 21st century has seen explosive and exponential technological advances such as gene therapy, cyber surgery, organ transplantation etc.

There is no doubt that as a direct result of recent innovations in diagnostic and therapeutic procedures patients live longer, and lead more productive lives.

Evidence based medicine provides a structured approach to patient care with guidelines for use of drugs and technological procedures in a scientific manner.

However, as the Chinese say - for every yin there is a yang and we must not be blind to the negative aspects of this technological revolution.

The New Techno-culture

Today, health care has been thrust into an era of technological culture which threatens to change the face of medicine and relegate the physician to the background. It is gradually

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eroding a physician's confidence in his own professional clinical acumen which is being replaced by a greater reliance on technology, reducing himself to an intermediary between the patient and the laboratory.

Don't get me wrong. Technology is an essential part of modern medicine. Patients expect it. Doctors are trained to use it. Hospitals advertise it. The media raves about it and the industry makes billions of dollars selling it!

The economic and social incentives are very powerful and have succeeded in convincing the world that more is better and the latest is best.

With globalization, medical technology is fast embedding itself even in our own culture. With information technology at our finger tips patients are increasingly knowledgeable and eager to have access to the latest imaging techniques. Even our villagers are talking about MRIs and CT scans.

Technology vs clinical acumen

The status of medical technology has been elevated and become synonymous with modernisation and scientific progress. The input from the clinician has been minimized. The patient's history is ignored while awaiting results from machines, and the dialogue between physician and patient has become unimportant.

Medical competence is judged **not** on the clinical ability, but on the quality and variety of technologies used. This has discouraged physicians from continuing to develop the art of clinical diagnosis, now considered to be imprecise and time-consuming.

Malpractice and defensive medicine

Physicians are thus increasingly putting their trust in technology. Many of them do this to avoid malpractice law suits, which has perpetuated this "total reliance on machine-generated information". There has been an increase in litigation for failure to use all

available technologies, which we clearly saw in the landmark case in our own country where a respected physician was charged for failing to order a CT scan.

Out of this situation has emerged a term, "defensive medicine," which refers to the use of more procedures than necessary to safeguard against litigation.

We reflexly over test and over treat in order to protect our patients - and ourselves. We feel judged by everyone - ourselves, our colleagues, our patients, the health care system, and the lawyers. The meaning of "first of all, do no harm" from the Hippocratic oath has changed over the years. We feel that "doing everything" is the best practice and the way to prevent harm, and shelter us from blame.

This has clearly been shown in many surveys. In one American survey in 1972, more than half of 16,000 surgeons, and in another in 1977, three-quarters of 111 physicians admitted to ordering unnecessary tests to avoid lawsuits.

The law unfailingly accepts laboratory findings as against clinical acumen which is considered opinion-based, inaccurate and misleading.

In the not so distant past, the term "malpractice" was justified as ethical errors of negligence, callousness, or incompetence. Today due to a belief in the accuracy of technology, malpractice is viewed as technical problems of "random human error," "system breakdown," or lack of specialized equipment".

Patients and the legal profession should realize that the more malpractice suits that come up the more extensive and expensive this defensive medicine is going to be.

The most effective method of warding off law suits in medicine is a good doctor-patient

relationship achieved by practicing the art of medicine.

As Doctors, we have to accept the fact that uncertainty is inherent in health care, as the human body works in a complex manner in which outcomes are non-linear and often unpredictable. It is said that “Medicine is a science of uncertainty and an art of probability”.

Are we using technology or are we being used? Are we using technology on a scientific basis or are we driven to use it because we are insecure or are we enticed by the propaganda and the favours extended by the industry?

We must justify every test we order, considering the cost-benefit.

Will the test change my diagnosis? Will it change my treatment?

Do I need confirmation of my diagnosis? If so what test would be most appropriate, and when?

The evaluation of a child with fever and cough is a good example. There are many possible causes and a huge battery of available tests. But won't a careful history, examination, and clinical judgment suffice? Will a blood test and chest x-ray change the management plan?

Who will benefit from unnecessary, expensive investigations? The patient or the hospital? We need to question ourselves at every step of the clinical process.

Misuse of Technology

It is important to recognize that though technology is a scientific invention its use is often far from being a scientific intervention.

The problem isn't just the cost, but that it is often used at the wrong times and on the wrong patients. It is not medical technology that makes health care costs spiral out of control. It is the people who use it without understanding.

The most commonly cited technology creep: “First the device gets approved for a small high-risk population where there is a proven benefit. Then the hospital finds that it is not profitable as too few patients are using it. Doctors are encouraged to extend its use to low risk populations to justify the cost of the machine. The cost is defrayed within 3 years and thereafter it is pure profit!

The “State of the Art”

In the past hospitals were established by the medical profession and the doctor and patient were the chief actors on the stage. With the advent of medical technology, ownership passed onto the business sector and venture capitalists for only they could fund the escalating costs. Hospitals are essentially geared to profit and not to the scientific and ethical practice of medicine. Today, when we see an advertisement of “a state of the Art hospital” we know it refers to the technology, and not the medical elite who practice there.

Many nursing homes take a sample of blood from all patients on admission and do up to 750 tests to assess all organ functions so that the need for a clinical history is diminished. Patients are often afraid to see a doctor or enter hospital in fear that the bills would be astronomical. By such practice, we lose the respect people had for the medical profession and give way to unhealthy practices – even charlatans.

Modern intensive care is a perfect example of both the benefits and misuse of technology with escalating costs and distancing of the doctor from his patient.

In the 1950s intensive care units had little technology and the doctors and nurses played the primary role in patient care. Nurses were particularly adept at monitoring and assessment, and more observant and more attentive to the humane needs of patients.

Today the central role in the ICU is taken over by instruments, the patient is invisible, the doctor is on his way out. Monitoring is

done at a nursing station where all vital statistics are computerized, and the patient rarely feels the touch of a human hand at the bedside.

When technology was new to us we enjoyed using it – but we were so very cautious. We were objective and looked-for justification and cost effectiveness for each individual patient.

Today technology is no longer new and its use is so commonplace that it is often unjustified. More important, it no longer challenges us and puts our knowledge to the test. It has swallowed our mind. There is no longer a creative struggle in us between our own intuition and the value of technology. We have forgotten that they are tools to be scrutinized, criticized and controlled. Terminally ill and even brain-dead patients are often placed on unjustified life support systems with no thought given to the financial and emotional cost.

The “Art”

Medicine is a profession that should incorporate science and scientific methods with the art of medicine. It's thrust is to allay anxiety in the minds of patients and to console them under all circumstances. The art incorporates the whole gamut of doctor patient relationship. Often doctors are criticized and abused and even taken to court not because of their lack of knowledge but rather related to their insensitive behavior towards the emotional distress of the sick.

The Art of medicine has always been the basis of medical practice. The knife can excise or a drug assist but ultimately it is nature that plays a large part in recovery. These vital forces of the body and positive attitudes of the patient, and his faith in the physician, play a major role in the healing process.

The art of medicine is the unchanging rock of ages – the solid foundation on which we should build our practice.

Scientific truths on the other hand are not true for all time. Today's truth maybe tomorrow's folly. Medicine and science are always in process, progressing and changing.

The half-life of truth in medical knowledge is 3-5 years. Half of what is true today will be proven false within the next five years. Unfortunately, we don't know which half that is going to be! It also means that what is unknown today will be common knowledge in 5 years' time.

Medical science is not a pure science like physics or chemistry. It is an applied science - applied to a class of problems in human beings where no two individuals are alike. A one size fits all treatment model advocated in computerized statistics does not always suit the individual. The human body is dynamic and its processes a-linear and unpredictable.

Modern medicine is all about treating the disease and rarely cares for the patient who has the disease – a whole person seeking mental and emotional support, or at least some compassion and guidance. This de-personalization of patient care and the loss of the fundamental human relationship between doctor and patient has caused an increasing popularity amongst patients for various forms of “alternative medicine” with a more holistic approach. One of them is interestingly called personalized medicine with 4Ps – Predictive, Preventive, Personalized & Participatory – the stress being on Primacy of Patient Care and Patient Autonomy.

The question repeatedly asked by patients is “what is wrong with ME?” – Me being the individual and not the disease.

The Art of patient care is a skill based on empathy, acquired by experience, and encompasses understanding the individuality of the patient.

This makes all the difference to quality of care. The best doctors respect but are not hidebound by rules based on statistics. The good physician treats the disease; the great physician treats the patient who has the

disease. That is what makes him special in the eyes of the patients and be worthy of their trust.

The Art of patient care includes technical expertise and experience, wisdom more than knowledge, and creative and innovative thinking ever alert to the reality that sickness may not be what it seems. Vital information can be obtained only if the doctor has the humility to not only question but also listen carefully to the patient to understand his attitude to his illness, his fears and problems.

An increasing number of patients today complain that after 2-3 hours in the waiting room they are seen by the doctor for only 2-3 minutes. It is sadly becoming the norm in Sri Lanka so that once a patient asked a doctor at the end of his consultation: "Doctor I did not have to wait for hours to see you, you gave me time to explain my problems and fears, you explained what was wrong with me in simple language. You wrote a prescription I could read and explained the medication and side effects. You gave me the confidence to face my illness. Please forgive me for asking, but are you a real (Sri Lankan?) doctor?"

If we do not practice the art of medicine and restrict ourselves to providing the patient with just diagnosis and treatment of disease via technology there will come a time when the doctor and nurse will be cut out of the healing loop and the computer can displace us.

Such a data base was created in America for teaching medical students and one of them commented: "This machine can diagnose and treat patients with a precision and reliability that we humans could only dream of. It is deflating to think that we would suffer through a decade of schooling and thousands of dollars in loans, to find that we are replaced by computers".

Despite all their flaws and imperfections how are human doctors still an integral part of

modern healthcare? The answer is - the "art of medicine" – the human touch.

The art of medicine is very simply defined as what you do when things don't go how they're supposed to—when one plus one does to equal two.

The art of medicine is what you lean on when you have to explain to family members why the surgery you just performed didn't produce the beneficial results.

The art of medicine guides you in dealing with an emotionally fragile patient who needs a procedure or treatment that you know will be beyond their ability to cope.

The art of medicine dictates how you break the news to a worried mother that her son has just passed away; or how to cautiously guide families to the acceptance of impending death when they are clearly in denial.

The art of medicine is choosing a course of therapy based as much on an understanding of the personality of the patient as on knowledge of the disease.

In conclusion may I suggest that we must reinstate the art of medicine in our practice and regain and assert our faith in our own medical judgment and ourselves; using technology wisely and only in the best interest of the patient.