

Changing Face of Medicine: Reclaiming Humanity in a Tech-Driven Era

‘Wherever the art of medicine is loved, there is also a love for humanity’- Hippocrates

Few professions have been transformed by science as dramatically as medicine. In recent years, technology has become so deeply embedded in the medical landscape that the idea of doctors being replaced by machines is no longer a pure science fiction. Robots perform complex surgeries, artificial intelligence assists in diagnosis, and dazzling advancements offer hope for conditions once deemed untreatable. Yet, as medicine races into the future, we find ourselves confronting an uncomfortable paradox: despite these triumphs, a growing mistrust now festers between the lay public, layperson and the medical profession as such.

It would be easy to assume that the increased sophistication of medical tools should go hand in hand with greater trust and respect for doctors. Ironically, the very opposite seems to be true. Court cases against medical professionals are on the rise and stories of violence in hospitals after unexpected patient deaths speak to a simmering antagonism not just in India, but globally.

What explains this shift? A few decades ago, when medicine’s scientific toolkit was basic and limited, doctors were placed on a pedestal. Their image, often described as “next to God,” reflected society’s appreciation for their role as healers. Yet today when the science holds medicine in its tight embrace, the regard what the people have towards medical profession is not as great and the image of the doctor has plummeted sharply.

This change hints at something deeper than technological progress. Why is this so? I think it’s because in a way medicine has strayed from its path, has lost its real goal. The mechanization of medicine with the aloofness of science and technology has submerged the art within medicine. The mechanization and commercialization of healthcare, while enabling remarkable medical feats, has suppressed the “art” within medicine-those intangible qualities of compassion, wisdom, and intuition that cannot be measured by a machine. Modern physicians- across all specialties- are now more connected to machines than to their own patients. This shift has led not only to a greater reliance on technology but also to a subtle encouragement for patients themselves to depend on these devices. In this context, the essential doctor-patient relationship, the soul of medicine is eroded.

Compounding this problem is a growing tendency toward compartmentalization: Doctors focus on different organ systems, sometimes at the expense of seeing the patient as

a whole. Young medical professionals are eager to master new technologies often forgetting that medicine is best learned at the bedside-not from the textbooks, nor from the appreciation of beautiful images given to you by CT scans, MRIs, Endoscopies, Angiographies and all other ancillary machines that are associated with current modern affair of medicine. Please do not mistake me for a moment, science indeed is extremely important for medicine which has given medicine a quantum leap into the 21st century but what one must realize in all stages of one’s career is that there is more to medicine than science; for example, technology can’t make you take good history, technology can’t substitute for thorough meticulous physical examination nor can any gadget soothe the relatives whose patient is lost.

What exactly is this art of medicine? It is difficult to define in words something which has no physical attributes and which is unquantifiable. It includes properties of mind and heart which you blend together in healing process. Remarkably enough the science which has done so much for medicine, has pushed this art into background. It lurks into background and if we do not resuscitate it, it might become a lost art which will indeed be a big blow to the medicine

We must remember that the art of medicine existed even a million years ago. The art of medicine is often associated with the advent of man, with the awakening of human consciousness and the emergence of Homo sapiens on earth. First and foremost, what is required is art of taking good history which is almost forgotten. Please do remember that it is impossible to master the art of history taking even if you live three lifetimes. Why is it so? It’s because same disease does not manifest itself in the same way in different individuals; each patient and each human being from that point of view is unique and the manifestations of the disease may be different in different individuals. The manifestation of the disease does not only depend on the disease process itself but also on the changes that are produced in the body which are not same in everyone. It depends on the adaptations of those changes by the body which are not same in everyone, on his genetic makeup, his emotional makeup, his physical strength, on the environment in which he lives and so many other factors about which we know near to nothing. So, if you have a good history or at least know how to take a good history more often, you will not be able to make a diagnosis but at least it will show a path on which you must travel.

To obtain a good history, the most important factor is effective doctor patient communication. Doctors with good communication skills identify patient’s problems more

accurately, foster psychological adjustment, and increase patient satisfaction. Respect and fairness must guide every clinical encounter. It is important that you not only look at the problems that arise in a patient's body but also see the province of his mind because not uncommonly it is the mind that colours the symptoms and the disease with which the patient comes to you.

In his book 'The Lost Art of Healing' one of the most eminent physicians, Dr. Bernard Lown, reacquaints us with a classic notion often overlooked in modern medicine: health care with a human face. He describes how true healers use sympathetic listening and touch to hone their diagnostic skills, how language affects the perception of illness and how doctors and patients can cultivate a relationship of trust.

Physical examination, too, must be revalued. Recalling past experiences, interpreting subtle findings, and reaching reasonable conclusions combine both art and science. Surgeons must sharpen their sense of sight, touch, hearing, even smell and process these impressions thoughtfully during examination. Shortcuts that replace these clinical skills with tests may seem convenient, but they often overlook the simple diagnosis that can be diagnosed at a treatable early stage. By following time and effort saving ways, we are losing much more than just early diagnoses, we are losing the ritual of healing itself. In fact, the most groundbreaking innovation in medicine in coming few years may be a renewed appreciation for the power of a human hand- to touch, to comfort, to diagnose and to bring about treatment.

Leopold Auenbrugger discovered percussion by observing the tapping of wine barrels by his father. He brought that same curiosity to patient's chest and abdomen and heard the music of diagnosis which you can think of as ultrasound of that time. Laennec watched children playing with hollow sticks on the streets of Paris and invented the cylinder and that's how auscultation and stethoscope came into being. These inventions were not just technological advances; they embodied the spirit of observation, touch and listening- the very art of medicine.

Surgery too illustrates the balance between art and science. Journey of surgical education from barber surgeons to university trained surgeons reminds us that technical skill is honed over time, often through repetitive practice and observation. Consider the story of Hamilton Naki, a school dropout, who through keen observation alone, mastered surgical procedures and played an essential role in the world's first heart transplantation. The Shouldice Clinic, where surgeons refine hernia repair techniques through hundreds of operations each year, achieving recurrence rates dramatically lower than the global average, is another example that reminds us that skill is not only about qualification but about dedication and observation. Even in modern times, pioneers like Philip Mouret, who introduced laparoscopic cholecystectomy,

demonstrated the importance of hand-eye coordination, manual dexterity and psychomotor skills.

Yet technical mastery alone is insufficient. Research from Harvard, the Carnegie Foundation, and Stanford confirms that 85% of success in medicine depends on "people skills," from creativity and collaboration to decision-making and communication; only 15% derives from technical expertise. Indeed, a 2015 study attributed 24% of malpractice cases to communication breakdowns, underscoring the vital role of soft skills in effective practice.

Another mantra in today's era is evidence-based medicine. Of course, evidence-based medicine is important but you should also necessarily know whether what you are doing in the management of the patient is right or wrong. We cannot do the treatment on individual fancy or fads. I would like to reiterate that the greater part of medicine is still empiric in nature. Double blind randomized trials are the gold standard of evidence-based medicine. They are all important but we should remember that studies on large population and results of those studies need not be necessarily applied to individual patient you are treating. Observational studies come right down on the run in relation to evidence-based medicine. But, Dear colleagues, some of the greatest discoveries in medicine have been through great observations. Take into consideration the observation of Dr. Edward Jenner in relation to small pox vaccination, observation of Louise Pasteur in relation to rabies vaccination and pasteurization, observation of Josef Lister in relation to the monumental advances in surgery & observation of Ignas Semmelweis in relation to hand washing and preventing infection. Evidence alone can't be sacrosanct. Had it been so, medicine would have been static and history teaches us that medicine is dynamic, moving. Importance of genetic studies has been realised today- why some patients respond to a specific treatment may be related to their genetic makeup and why some patients do not respond to a particular treatment also may be related to their genetic makeup. If that indeed is worked upon you may have to rewrite the entire evidence. So, though evidence-based medicine is good, it is not infallible; though important, it is not all inclusive and though it is applicable to many, it is not necessarily applicable to all. There are many other aspects to medicine - social, economic, cultural, philosophical, religious and many other factors which make practice of medicine as it should be, factors which help in creating a proper bond between the doctor and patient.

How many of you have heard of Ivan Illich? His 1st book is Medical Nemesis and the 2nd book he has written is Limits to Medicine. Ivan Illich pointed out that Modern medicine has 3 great disadvantages. First is iatrogenic problems that are created by the medical practitioners and that they call as "Clinical Iatrogenesis". The procedures that we perform, the drugs that we use, the medications that are given have effects as well as side effects that could be harmful to the patient. And there have been voluminous studies and reports

of number of injuries including deaths that have occurred due to what we call clinical iatrogenesis. Ivan Illich went on to say that the other disadvantage of modern medicine is “Social Iatrogenesis” which means that the medical profession is so geared that it makes society hopelessly dependent on it. That is good for medical profession but not good for the society at large. But what we must be concerned about is what he termed as “Cultural Iatrogenesis”. What he did mean by cultural iatrogenesis is that the modern medical profession is so hell bent on fighting death to the very end, and that can happen with critically ill patient, that you carry your care to the point of absurdity, where you prolong the act of dying making death, gruesome, lonesome and economically disastrous to the patient and family and therefore we should know our limits.

Dr. Atul Gawande’s ‘Being Mortal’ is another book that makes you pause. He is a surgeon but instead of celebrating medical miracles, he writes about what medicine often avoids – aging, frailty and how we deal with the end of life. He argues that while doctors are trained to fight diseases at all costs, sometimes what patients really want is dignity, autonomy and life that still feels like their own even if it is short. He argues that as doctors, we are so conditioned to ‘fix’ problems that we often forget to ask what matters most to the patient.

Today, the commercial forces shaping medicine are as powerful as the technological ones. The rise of profit-driven healthcare systems has sent treatment costs soaring often with little correlation to quality or outcomes. Doctors may find themselves pressured to act as sales agents, incentivized for ordering diagnostic or procedural interventions. The result? Patients, especially the poor or those with complex needs, are sometimes sidelined in favor of profitability.

This institutionalization fosters monopolies, where a single conglomerate can control every aspect from diagnostics and pharmacy to insurance. Beneath all this, a new gold rush is underway- not for organs or land, but for data. The ethical dilemmas of medicine today are therefore not only clinical, but also systemic and societal.

Who does the system truly serve? That is the pressing question for every practitioner, policymaker and patient. Restoring the value system in medicine starts with reaffirming three pillars: ethics, effectiveness, and empathy. Compassion and trust must take their place beside expertise, forming the mutual bond that has anchored medicine through the ages.

The path forward is not an abandonment of technology but a recommitment to balancing scientific rigor with humanism. We need to restore the doctor-patient relationship, value bedside care, and never forget that, sometimes, the most powerful innovation in medicine is simply the warmth of a human hand.

Let us strive to lead with ethics, deliver with effectiveness, sustain with efficiency, and most importantly practice with empathy. For as the saying goes, “To be trusted is a greater compliment than being loved.”

I will end my writeup by quoting words of an ancient physician from Middle Ages “Maimonides” –

”Let me not forget that the patient I am treating is my fellow creature in pain and distress.

Let me not consider him just a vessel filled with disease”.

DR. PRATAPSIKH APPASAHEB VARUTE

sMBBS, MS. FRCS (Glasgow), FAIS, FMAS, FIAGES

Chief Consultant, General and Laparoscopic Surgery

Prof. Dept. of Surgery DY Patil Medical College, Kolhapur

Director, Dr. Appasaheb Varute Memorial Hospital Kolhapur

President, Maharashtra State Chapter of ASI 2017 -18

Hon. Secretary ASI-2022-24