Computation, competence and compassion

Once upon a time of Shusruta, it was possible for people to imbibe a large proportion of the knowledge available in society. After all, things changed slowly, at a human pace. As they grew up, students learned about what had happened before, and they could keep up with the rate of change as new information came to light. Technology changed slowly. Moreover, it was mechanical, which meant it was visible. Students could explore it, disassemble it and hope to improve upon it. Even though the results could be complex, the reason behind the complexity could usually be seen, examined and talked about. The art of medicine could be lived and experienced. As a result, for two and a half thousand years it was learned and passed down the generations by the word of mouth.

This model of learning seems to have been rendered irrelevant by the scale and pace of developments in science and technology. We must accumulate an enormous body of knowledge, with the amount increasing with every passing year. Not only is formal schooling an absolute prerequisite for the practice of medicine, the number of different topics that must be mastered is ever-increasing. (1) College, postgraduate education and even super-specialisation are not enough to keep up with medical knowledge, as it gets overhauled every two and a half decades. Doctors are no longer able to keep up with advances even within their own field, let alone in all of medicine.

Obsolescence is today's watchword. If you don't keep up, you are told, you will be fossilised within the fortnight. We *could* practice with fossilised knowledge. But that may be incompetent practice, and doing so knowingly is – or should be – a tax on our conscience.

However, the drive towards specialisation may render all of us like the seven blind men and the elephant — each one doing his bit and forgetting the whole. This must explain the renewed popularity of "alternative medicine" which addresses the whole patient – body and soul, and in his or her social context.

Which brings us to the second, and related, problem of modern medicine – its divorce from social concerns. Social problems, it is assumed, are caused by forces beyond physicians' control. Though physicians are at the top of the totem pole of health care, they do not feel sensitive to or responsible for all aspects of health care. This mechanistic, Cartesian view of life holds that the human body is a machine. Further, Descartes' separation of the mind from the body (2) established the biomedical model of western medicine that is followed to date. Healing is no longer the interplay of the body with the mind and environment. All that the body needs is a tweaking of genes and chemical alterations to get over illnesses — the engineering approach to health. The last bastion, psychiatry, has also finally succumbed to healing psychological illness by physical means. Happiness is the state of your neurotransmitter, in excess or in drought.

Thus, state-of-the-art technology plays a central role in medical care. The practice of medicine has shifted from the general physician to the hospital, a point that was made repeatedly in the Journal's issue on general practice. (3) In hospitals, medicine has become progressively depersonalised, if not dehumanised. Hospitals have grown into large professional institutions, emphasising technology and scientific competence rather than compassion and contact with patients. Patients, in turn, feel frightened and helpless. "Competence is a measure of one's compassion," is the new age mantra. The cost of medical care has increased at a frightening pace, going up at twice the rate of cost of living. Today, it is 15 times what it was at the 1960s. (2)

Worse, the treatment patterns we follow are determined by market forces and the technology-push economy, not by people's needs. It is ironic that despite the peer pressure to keep up to date, medical representatives provide the only continuing medical education that doctors receive throughout their careers. In today's world, such technological education is equated with competence. It is a sign of the times that compassion is given a low priority.

The digital age addresses today's problems with more technology. (3) So, to keep abreast there are digital libraries, multimedia, the internet and other materials that were never available in the era of books.

Practitioners today are torn between two pressures. They must strive to keep up to date even as knowledge gets increasingly fractured and health care gets more technology-focused. At the same time, they must provide holistic care relevant to the patient's needs.

While our personal pendulum swings between the focus on technology and that on holistic care, I do not believe that we need turn the clock backwards and reject technology altogether. Keeping up with technology is mandatory for all health-care personnel, as much as it is for other professionals. Ultrasound and CT scans have transformed our lives. Sometimes we must wonder how we managed before the time of the photocopying machine and the cell phone. We have to strive to keep up with the monster, and talk to the ghost in these machines – all in the best interests of the patient.

References:

1. Norman Donald A. *The invisible computer*. The MIT Press, Cambridge, Massachusetts, **date?**

2. Capra Fritjof: *The turning point.* Bantam Books, **place and date?**

3. Donald Anna. *Technology transfer*: the problem with 'trickle down' theory, *BMJ* 1999; 7220: 1298-99

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