

Response by the Representative of Inductees, Academy of Medicine, Singapore at the 1999 Annual Induction Ceremony: Hippocrates in the Next Millennium-Resurrecting the Dying Art of Apprenticeship

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"I will pay the same respect to my master in the Science as to my parents and share my life with him and pay all my debts to him. I will regard his sons as my brothers and teach them the Science, if they desire to learn it, without fee or con tract. I will hand on precepts, lectures and all other learning to my sons, to those of my master and to those pupils duly apprenticed and sworn, and to no other."

Hippocratic Oath

Master, Members of the Council, Fellow Academicians, Ladies and Gentlemen.

The learning of medicine has evolved significantly over the past few decades. Most of us will still remember the days of old where we learnt medicine from the school of hard knocks, being intimidated by the professor at the bedside in the morning, inundated by a deluge of information in the lecture room in the afternoon, and ploughing through the endless piles of notes and textbooks through the night.

We now stand at the threshold of a new millennium, where the student of medicine has access to medical knowledge through multimedia CD-ROMs, online electronic journals, simulation models, and virtual reality systems-just to name a few ways how technology has revolutionised the learning of medicine.

One wonders how Hippocrates will fare in our era of scientific medicine and high technology. If the Science, precepts, lectures and all other learning can be handed down through these "high tech" means, will the concept of mentoring the apprentice in medicine become obsolete? While medical and scientific knowledge may be acquired through these novel channels, sound clinical judgement, technical competence and wisdom in clinical decision-making can really only be gained through the art of apprenticeship.

To quote Cowper,

*"Knowledge and wisdom, far from being one,
Have oft times no connexion.
Knowledge swells in heads replete with thoughts of other men,
Wisdom in minds attentive to their own.
Knowledge is proud that he has learned so much;
Wisdom is humble that he knows no more."*

I think my fellow inductees will agree that at the end of advanced training, we are more impressed by how much more we have to learn than how much we already know.

The Chinese proverb reminds us, "The sea of learning has no limits".

Claude H Organ Jr, when he was Professor of Surgery at the University of Oklahoma, wrote: "The half-life of scientific knowledge is five to seven years, which makes learning a dynamic and perpetual process."

At the recent convocation of the University of Sydney two weeks ago, I was deeply moved to see my teacher and professor from my undergraduate days, Robert Pho, receiving his MD for his thesis on his pioneering work in bone grafts. It is truly an inspiration to know that even at the stage of being a professor of international renown, he still has not lost his yearning for learning. He later remarked, that to be a good teacher, one must always be a student. He echoes the words of Charles Mayo who said that "The safest thing for a patient, is to be in the hands of a man engaged in teaching medicine. In order to be a teacher of medicine, the doctor must always be a student."

Looming on the horizon are also the processes of accreditation and recertification. As we leave the envelope of supervised learning, may I suggest to my fellow inductees that besides attending conferences and peer review activities, an excellent way of keeping up and maintaining professional standards is to engage in the teaching of our junior colleagues, students, nursing and paramedical staff. Seek every opportunity to teach, impart your skills and

share your experience, not as a learned supervisor, but as a supervisor who is still learning. For you are imparting an important dimension of the art of medicine that cannot be handed down through any other means. This way, not only will you be able to enrich your own experience by keeping abreast with the latest developments in your field, but you will also gain wisdom in introspection.

I was recently asked to be a trial examiner for the candidates to the Fellowship. I realised what little knowledge I had left from the time that I actually took the fellowship. So in the few days leading up to the trial examination, I found myself in the library, desperately trying to brush off the cobwebs in my mind, and consumed as many yearbooks in surgical pathology as I could. But I must say that it was a very profitable exercise and I certainly gained more from the trial exam than the candidates did, who in all probability knew much more than me at that point in time anyway.

Seneca, in his Letters to Lucilius (64 AD), left him these words: *Homines, dum docent, discunt* -“Men learn while they teach”.

There is no other physician in history that epitomizes this concept better than Sir William Osler. Osler identified the task of the teacher as one who winnows the wheat from the chaff and presenting it in a digestible form. It was Osler who established clinical clerkships in medical education when he was founding chair of medicine at Johns Hopkins University.

When asked what his most important contribution to medicine was, Osler simply stated, “I desire no other epitaph... than the statement that I taught medical students on the wards, as I regard this as by far the most useful and important work I have been called upon to do.” In using the term “student”, Osler was referring to all trainees in medicine—interns, residents and students. They were all his junior colleagues as he described them. Osler’s proudest honour was the unwritten title of “student’s friend”. I am pleased to note that there are many in the Academy who are deserving of this title as well.

Today, my fellow inductees and I are proud to be admitted to this honorable fraternity as Fellows of the Academy of Medicine of Singapore. May the title FAMS humbly remind us to be “Friends of All Medical Students”, in the true spirit of Hippocrates and Osler as we enter the next millennium. While the science of medicine will continually change, the art of healing is a timeless legacy-of which we are but its custodians, not its owners. May we preserve this precious mantle and pass it on. I would like to thank the Academy for the privilege of delivering this Reply Address.

REFERENCES

1. Edwards J C, Marier R L, editors. Clinical Teaching for Medical Residents: Roles Techniques and Programs. New York: Springer Pub Co, 1988.
2. Downie R S, Charlton B. The Making of a Doctor: Medical Education in Theory and Practice. Oxford, New York: Oxford Univ Press, 1992.
3. Sinclair S. Making Doctors-An Institutional Apprenticeship. Oxford: Berg (publishers), 1997.
4. Numbers R L, editor. The Education of American Physicians - Historical Essays. Berkely: Univ of California Press, 1980.
5. Lloyd G E R, editor. Hippocratic Writings. Harmondsworth, New York: Penguin, 1978.
6. Manning P R, DeBakey L. Medicine: Preserving the Passion. New York: Springer-Verlag, 1987.