Farewell to Professors

by

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The Professors are gone. What am I talking about? The professors are here! There is a professor of "this" and there is a professor of "that," - duly appointed by the Board of Regents, tenure and everything! It is true, indeed that the "professors" are around us, but the "Professors" with a capital "P" are gone!

Let's clarify: exactly what is a "Professor"? (Corollaries: The Old Man, the Chief, the Prof, etc.). His position was somewhere between a human and a demi-God, - like Hercules in mythology and Wonder Woman on NEFLIX.

As where the concept of "professorship" originated is a matter of debate. Was Hippocrates a professor or a God of Healing? A "real" Professor would probably answer: "What is the difference?"

Great clinicians, in the modern sense of the word first appeared in Renaissance Italy. But were they really "Professors"? While they were held in esteem, they spent most of their time running around princes begging them to pay for their food and electric bills. A **real** Professor would never do that! The Pope could stop Leonardo, but not Denton Cooley!

Why German Professors obtained such a high position in both professional and in social life, was the inborn respect of Germans toward authority. If you had a title then you were empowered, not only with a high social position, but also regarded as someone of knowledge and wisdom given by God and your title. If you would question the authority of the Professor, what would you do next? Doubt the omnipotence of Kaiser?

The British were, always at odds with the concept of "Professorship." They looked (and still do) at leading medical figures with a mixture of respect and humor, rather than with unrestricted adoration. This is especially true with surgeons. "Can a descendant of a barber **really** be a great medical man? They don't even call him a "doctor." The British honored Hunter, not because he was an exceptional surgeon, but because he was a great anatomist..

Later on, they mollified somewhat and several surgeons were appointed to lordship. Still, they could be called "my lord" but never a "doctor"! Only "Mr."

The French who always had enough *gloire* at hand, to sprinkle it around,. They even had a title for the spouse: *Madame la Professeur*. How nice! However, it was never enough to become *"Professeur"* He also had to be something *extraordinaire*, like evacuate Napoleon's wounded or circumcise Louis the XVIth.

The Italian Professors did it the easy way.They just divided medical history among themselves. "Your university is the oldest in Europe and my university did the first thoracotomy in medical history. *Va bene.*

In the United States the development of the authoritative figure of the Professor was based on both the British and the German model. Of the many excellent American physicians, relatively few achieved a "Professorial" image. Halsted did because he was eccentric. John Kirklin because he scared the daylight out of everybody in Birmingham. Blalock was from John Hopkins, thus Professor ex officio.

While some admirers may have believed that Professors just appeared like Pallas Athaena, jumping out of the head of Zeus in full armor, scalpel and stethoscopes; they were trained just like other mortals.The learning process in the 19th or first part of 20th century Professors received and later taught to their acolytes was primarily based on visual observations. It began with extensive study in anatomy, then progressed into pathology and culminated in a rigid "on-hand" preceptorship. To become somebody in medicine it was a pre-requisite to spend a year or more in an anatomical or pathological service, where teaching was based on observation and understanding, rather than on understanding and observation.

Professors had many similar attributes, but they were certainly not a homogenous crowd. Most of them were "Grand Old Men." Young Professors, while not unheard of, were rare and either of extraordinary talent, or married the daughter of the old Professor. There were good Professors and there were bad ones. Some of them were good natured, others lacked any

humor. Some of them were outgoing; others were close to a recluse. However, they had a common denominator: They were kings and princes! No hospital administrator would even think of walking up to a Michael DeBakey and tell him when he could or could not do. He would have been dead in two seconds, probably struck by lightning.

All of these gave the Professors a tremendous leverage to make their ideas a reality. In short: they were tremendously efficient! It is without doubt that the Professors thus empowered contributed tremendously to the development of fact-oriented medicine as it exists today.

While Professors were "never young," they also did not age. They always looked like as you saw them first: Immaculate white coat, to which like a bridal trail, a long line of fellows was attached. The Professors' impeccable "freshly ironed" appearance did not change even after a night of strenuous work. They often dressed somewhat eccentrically; striped pants in Europe and string-ties in Texas.

The career of a Professor was usually longer than that of an average physician . While mandatory retirement age existed even a century ago, Professors were often able to bypass the rules and stay longer. Age did not stop their tremendous drive to work.

The Professor controlled the pace at which his trainees could achieve professional competence by the number and variety of clinical material they had given access to. In Europe, his powers were further enhanced because the period of training was not strictly defined. The Professor was, in most cases, also the examiner. Our present methods of formal (Board) qualification finally got rid of the Professors "great questions" which descended through generations. My favorite question was: What do you do if you are on bypass for 60 minutes and you are half way to put in an aortic valve? The proper answer was: You quit cardiac surgery.You are too slow! In Europe; the examining Professor not only questioned the candidate, but also observed him (there was no "her" at that time) to perform examinations and surgery.

The Professors of the past did not want you to develop your own "thinking;" they wanted you to act accordingly to **their** thinking, by **their** attitudes, and apply **their** methods. While this

sounds today quite unappetizing, the approach did have some advantages. The logic of the Professors was time tested, that of the young doctors was not. The Professors were based on a life-time of experience; the young doctors were at a limited observation and of random reading. The Professor was wise and astute. The young doctor was obliged to imitate his teacher and only after he lost both of his protection and his domination, could he keep what he chose and discard what he did not..The philosophy as how a physician should be trained and how medicine should be practiced has changed radically and is still changing.The "Professor's method" was based primarily on anatomical and physiological knowledge, and also on clinical and sometimes intra-operative diagnostic acuity, and on a skill obtained by over-and-over repetition. They were masters as how to get out of trouble. Today we try to learn as how to stay out of it!.

Nowadays, trainees are exposed simultaneously to several different methods of treatment, and are encouraged not only to learn, but also to choose. The teaching tool of the Professors was as how to copy. Medicine changed very little during their lifetime. Today medicine is changing every day and education is a continuous process. Learning of the professors know-how has now been replaced by understanding of the disease and its consequences, not only in the anatomical and microscopic scale but in molecular dimensions as well. This modern learning process is tailored to the individual and encouraged, but certainly not dominated by the teacher anymore.

As the priority shifts from traditional to molecular science and is moving rapidly to genetic dimensions. We know that this will benefit the patient, but what will it do to the physicians soul? Honestly, what would you choose a warm hearted, caring physician or a CT scan? I would go for the CT scan!

Scientific research for a future leader used to be a "must." Nowadays, by careful rewording, we are changing the requirements of involvement in research from "necessary" to "advisable." The question often is not "what is the merit?" but, "got grants?" Thus, the lion's

share of the research is conducted, not in our medical institutions, but at the facilities of pharmaceutical or medical device companies. Those who indeed work in laboratories take it as a permanent carrier and seldom if ever progress into a leading clinical position.

In the old times, the novice physician aspired to become a Professor himself. The ambition of most young trainees today is to have a "job" which assures him adequate time to spend with his family and to provide him with enough money. Our priorities changed. Today, the fact that somebody presents lectures, or writes papers is not rewarded by respect and by promotion as much as it used to be.

Most Professors treated the indigent free but were not bashful to charge ample to the well-to-do. As the legend says when a patient questioned Sauerbruchs surgical fee the Professor said : Fine. Then I do second-class operation What is that?- asked the bewildered patient. I do first class with old assistants and new intstruments !

.Some of our ills the lack of "role-models." To whom can a young physician "look-up" to today? To the genius who invented Columbia Health Care? With the professors lost, we also lost our role models! They showed us the greatness of the human mind. Modern medicine, presents "only" the wonders of the micro-cosmos.

When the old-time Professors allowed one of his trainees to leave the nest, he was expected to take with him both the technique and the attitude of his teacher. Sometimes it was straight funny. I mentioned to a collegue that one of our surgeons is screaming and throwing instruments in the operating room. "I bet he was trained in by Lousville Kentucky!". He was right. . Nowadays, a physician is to carry with him what he has learned but also the capacity to insert himself into our present an age of continued education, the capacity to rapidly abandon, to analyze and to participate in the ongoing evolution and the ability to choose between the often radically diverging options of understanding technology from techniques to molecular biology, from genetics to economical influence forces. This is an entirely different attitude than

what the "old-time" Professors practiced and taught.. when changes were slow and very limited in his professional a life-time!

At his department the Professor was not only "captain" of the ship but the "admiral" of the fleet. If there was any discussion, it was done by the Professor only. Some Professors were famous for enforcing absolute "radio silence," i.e. if anyone uttered a word during surgery without being asked, faced absolute and certain disaster.

But I postulate that principal reason as why Professors became superfluous was the development of modern diagnostical methods, especially imaging. Nowadays, "virtual autopsies" performed with CT scan and MRI on the living patient and not in the morgue on an unfortunate victim of a clinical diagnostic "learning curve." Occasional differences between pre and post-operative diagnosis still exist, but they raise, not sympathy, but eyebrows. A great Professor was a great diagnostician to whom patients went on pilgrimage to find out as what is wrong with them like catholics go to Lourdes. You did not go to a particular Institution, you went to a particular Professor. Willis Hurst he knew what was wrong with you at the moment you passed his door .

The perception of this infallibility placed a tremendous responsibility at the Professors. Most of them had encyclopedial medical knowledge and had a high level of technical abilities. In an era which lacked modern technology, their diagnostic acumen often matched what we now get from a CT-scan or from an MRI. I remember, as a medical student, I asked the junior resident what was the diagnosis? He said, "Pancreatitis". I asked him, "How do you know?" He said, "The Old Man said so!" There was no need for any additional inquiry. Another time. I was in his office when an a an unreferred female patient came in. Without saying another word my Chief said: Let me see your breast. There was a tumor there. After the patient left I asked him Professor, how did you know? He said Francis, people who are afraid of cancer, have a special facial expression. Women know cancer if either they can palpate it in their breast or they

bleed. Now, if he would have bled, she would go to a gynecologist? Yes sir! Another time he fund an egg-size lung tumor by percussion. He could drive you crazy!

Professors were tireless lecturers, but they did not write too many papers. It was the custom of the times, however, to "hang" their name at the end of the list of co-authors, just to let everyone know who the boss is and whose idea the entire work was. Professors, like medieval feudal lords who enforced the *ius primae noctis* with the wives of their newly wed subordinates, jealously guarded their right that whatever was done "first" in their realm it was done by the Professor himself. As the story goes with Robert Gross' "first" patent duct ligation, the child was hidden in an undisclosed location until his Chief left for overseas vacation. Then it suddenly became an emergency.

Professors towered over meetings and blasted some of the miserable speakers out of their socks. They did not "talk," but prophesized, declared and pontificated. The late Osler Abbot of Atlanta was such an obstinate commenter that our Society established an award in his honor to be given to the most obnoxious discusser at their annual meeting. The highest degree was give to one of our members who was co-author in a paper and when it was presented he attacked it!. Professors never made mistakes and if they did, they had ingenious ways to blame their underlings.

The Professors loved rituals, especially the "Grand Rounds," origin of which reaches back into the early seventeenth century when patients were rolled into the amphitheatre for their features to be demonstrated to an audience of students and practitioners... The sight of the Professor moving from bed-to-bed followed by his cohorts was magnificent!

The pomp and circumstance faded when the large wards went out of fashion. "Real" grand rounds could be conducted only in large wards with the patients arranged in rigid military posture and the staff marching in formation. Now the Grand Rounds are replaced by fleeting reviews of angiograms, readings of three dimensional CT's in Radiology and by informed consents obtained by professional assistants. Who needs a palpating hand or a stethoscope

anymore? When did **your** resident use percussion to localize a pleural effusion?" "Call x-ray to tap the chest!" Pfui!

Now, we have a lot of good physicians , many great administrators, but our Professors are extinct.. Probably the main reason is that the Professor was that he was an unquestioned, undisputed and an absolute dictator. His decision could not be questioned; his wisdom was never the subject of doubt. His position in the institution was rock solid and his orders were carried out immediately and it meant doom for anyone who expressed doubt of his omnipotence. To contradict or even argue with a Professor amounted to an uprising against the captain of a British frigate. The culprit was soon walking the plank!".

The introduction of the modern insurance-powered compensation fee system delivered an additional blow to professional stature. By paying the same fee for similar service to the experienced, and to the novice alike, society brought down the value of the service provided by the Professor to the level provided by the populous. The king's new clothes! – by God, he is just like one of us!

Such a "power drainage" is not limited to the Professors, but it is occurring in all aspects of our professional activity. Hospital administrators usurp more and more say-so, not only over administrative proceedings, but also over clinical matters. Insurance companies and other health provider organizations are butting in on our clinical decisions. Clinical departments became "democratic," with input, not only by faculty members, but also by trainees as to how the department is run. Professional and other organizations provide and enforce training standards, as well as assure trainees' rights, - phenomena which would have shocked the old - fashioned Professor in whose "court" whatever the trainee got, it was by the Professor's grace.

Another reason why we see so few Professors around is simply the shortage of active elderly physicians. Our present population, especially cardiothoracic surgeons is getting more scarce and younger at the same time. The frustration with the ever increasing bureaucracy of our health delivery system, the decrease of monetary compensation and the longer working

hours drives many middle-aged physicians go into an earlier retirement or makes them take jobs with pharmacological and health device industries. The truth is that we do not have enough "Grand Old Men" left. Either they are dead, playing golf or practicing in Saudi Arabia.

An important contributing reason for the gradual disappearance of the Professors specifically in Cardiac Surgery, is the rapidly changing surgical technique. Professors were master surgeons and to become one, it took them a lifetime. They learned surgery when they were young and then gradually perfected it as they matured. When they achieved professorship, they were close to the peak of their surgical knowledge. Their eyes was probably not as sharp, their hand not as stable, but they had a tremendous life experience.. These "Old Men" have difficulty changing radically their technique from "full exposure" to "minimally invasive," from the fast "whistling knife" to a slow myocardial protection, from Heartport to beating heart, from endoscopic to robotic. He could not change and have difficulty in tolerating someone on his turf who could do things better than he could.

Today's surgical leader is expected to be young-to-middle aged, a smooth administrator, his skills from good-to-average , research activity optional, politically correct, "get along" not only with his institutional superstructure, but also with his own with faculty and trainees. He is also more expendable and may move to another position in a few years.

To be honest: The era of Professors is gone, just like the era of great artists and great statesmen is gone. Or may be the great physicians are still around; they just have no place left to stretch their ego. Some of their I attributes filled us with awe; others just proved that they were human like all of us.