Letter from Mumbai

TEACHERS AND STUDENTS IN MEDICAL COLLEGES

A recent debate in one of our medical colleges prompted the contemplation of the current situation.

It is common knowledge that the system of medical education in India encourages memorization over contemplation, blind obedience to what is uttered by seniors over questioning and, above all, a narrow vision that can only concentrate on how many marks can be scored in examinations. Improving stores of knowledge and wisdom, wide-ranging experience gained at the patient's bedside, the development of a soaring imagination and interests that include innumerable fields of human activity are rarely considered.

We persevere with our colonial heritage by 'Sirring' everyone senior to us. Most questions and answers by students include 'Sir' or 'Madam' inserted frequently into or between sentences. This trend leads to such incongruities as 'Deshmukh Sir said…' or 'Pradhan Madam did not appreciate…'

Some teachers pride themselves on the extent to which they distance themselves emotionally from their students. The latter, especially those who have just joined medical college and have yet to find their feet, feel lost and are in need of warmth, compassion and even affection. When they find their teachers walk in and out of lecture theatres, behaving almost as though students were burdens, they find themselves adrift. Lectures delivered mechanically, without empathy, humour, references to history, literature or works of art, worsen the situation. Such teachers are soon enrolled in the list of those whose lectures must be avoided. Few teachers are able to serve as mentors, guides and facilitators.

Teachers have also been found guilty of pimping. The term is used here not in its venereal sense but to signify attending physicians who deliberately ask students questions that the latter cannot possibly answer. When, as expected, no meaningful answers are forthcoming, the students are humiliated. Such a practice not only shows a lack of understanding of the attributes of a good teacher but also demonstrates a sense of inferiority and a streak of sadism in the teacher. No student is ever going to respect such a teacher or seek help and guidance from him.

Hierarchies flourish unchallenged. Interactions between the different rungs in cadres are cordial till an upstart challenges a ruling made by someone above him. If such voiced disagreements become frequent, the senior sees no way out apart from 'disciplining' the minion and meting punishment that may vary from taking away rights to debarring any participation in teaching and decision-making. Considering objections and suggestions on their merit is uncommon.

An already precarious situation was worsened when, in several public sector medical colleges, teachers above the rank of lecturers were permitted private practice. Soon, knowing where their bread was buttered, teachers started spending more and more time and energy on their private patients. The stipulated restriction on private practice—that it should be conducted only outside office hours—has not been followed by most. Poor and inefficient supervision of their activities by the administrative staff has encouraged this malpractice. Most institutions have witnessed reduced instruction by the patient's bedside. Senior and experienced teachers have been replaced at such sessions by registrars and lecturers. Students learn surgery as it is performed by these rungs as their more experienced seniors are preoccupied in operation theatres in private hospitals.

Is it any wonder that coaching classes have taken over functions that were the prerogatives of medical colleges? Catering to the fear-driven need to obtain huge numbers of marks at each stage of their career, such classes guide students on how to ace examinations. With a better teacher–student ratio, such classes are also conducive to closer interactions and catering to the special needs of students weak in certain subjects. While such classes started off by taking in students in their final year in medical colleges, we now see students who have just entered these colleges making a bee-line for them.

What are the corrective steps we need to embark on urgently?

Teachers

Ensuring that colleges perform their primary function of teaching effectively will, in turn, render coaching classes irrelevant and permit students to spend time where necessary—classrooms, laboratories and wards. It will also provide some free time for them to pursue other interests—music, art, drama, dance, reading and writing.

Teachers must respect students and understand the problems that they may face. The students may be handicapped by poverty, inability to overcome societal inequalities, education in substandard schools, the consequent difficulty in understanding the science of medicine and a general diffidence.

The teacher should, at the outset, reassure students that all of them, including the teachers, are embarking on a journey for learning and understanding the complexities of health, disease and the treatment of patients. Teachers are at an advantage merely because of their seniority and experience in the field but are, in all other ways, no different from those they instruct.

Osler's reed of humility should always be in evidence in the hands of the teacher. A corollary: there should never be any hesitation in a teacher stating to a student, 'I do not know the answer to your question. I will look into it and let you have my findings anon.'

The prime requisite of a teacher is command over his subject and knowledge that encompasses not only the classic texts but also the latest journals.

When quizzing students—in the classroom, clinic or university examinations, follow the dictum enunciated by the late Professor R.J. Last—always start from what the student knows very well and gradually make your way to the limits of his understanding. Encourage responses, never show a frown or say anything that can discourage or demoralize the student.

The teacher should achieve renown for updated knowledge, experience, compassion, empathy, concern and willingness to help students.

Students must feel confident of walking up to the teacher at any time to seek counsel, discuss problems—academic and personal—and for reassurance.

While there will be a need to discipline, this should always be enveloped in a constructive cladding. Morale must be sustained and not demolished. An appeal such as, 'I know that you are capable of much more (or much better)' may work wonders.

At all times, the teacher must be aware that students learn not from what is preached but from what the teacher practices. This is especially true in all interactions with patients and their families.

Students

We need two hands to clap. While students have rightful expectations of teachers, they too need to introspect.

The prime goal of entering medical college is to learn the art and science of medicine. While the science is crucial to proper management of the patient, it is art that makes the individual a humane, considerate and caring physician.

Respect often begets respect. Treating teachers with the respect due to them has been ingrained into us from our childhood. The newfound independence on entering medical college does not nullify this obligation to those who instruct and impart knowledge.

There has to be a give and take. While expecting teachers to be knowledgeable, students also need to remain up to date with what is being taught in classroom, laboratory and ward.

Studying the implications of an interesting experiment in the laboratory or the unusual illness demonstrated and discussed in the ward deepens understanding. Maintaining a record of such experiences, including findings on going through texts and papers in journals will, over time, result in a compendium that the student can always refer to for illumination.

Improving the culture

A major handicap is the lack of any attempt at determining the aptitude of students for medicine. Blind reliance on numbers of marks can lead to a person with an aptitude for commerce to land up in medical college. Likewise, when opting for postgraduate studies, low marks may force a student to take up psychiatry or dermatology when he possesses excellent manual dexterity and has skills in devising innovative solutions to vexing surgical problems.

Hitherto, medical education is imparted in lecture theatres and in laboratories or wards. Current trends favour replacing formal lectures to a hundred or more students by discussions in small groups in seminar halls. This engenders intimacy between teacher and students, facilitates the cut and thrust of discussions and arguments and helps students voice their doubts and seek clarifications.

Memorization should be replaced by reasoning and understanding. Once the student has grasped the how, why, what and when of an experiment, an illness or form of therapy he can deduce answers to queries from his store of knowledge.

A favourable argument can be made for a return to questions that require the student to reason and argue rather than merely place ticks in boxes. If examiners ensure that their questions can only be answered by those who have spent long hours in laboratories and at the bedsides of patients, practical experience will be actively sought by students to supplement what they have learnt from books.

The teaching and learning of medicine should be a joyous journey where students marvel and admire as they learn.

EDITING A MEDICAL JOURNAL IN INDIA

It is all too easy to criticize and run down our native publications, be they proceedings of societies or formal periodicals.

We forget that most internationally reputed journals are the products of professional organizations with full-time editorial and other staff. They have superb office electronic equipment. Their own libraries make searches, checks and corrections to papers submitted for publication less onerous. In-house facilities for page-setting, proof-reading, correspondence and for chasing authors, reviewers and others facilitate accuracy and save time. They have sizeable budgets that lead to subscription charges that prove prohibitive to students, teachers and researchers in poor countries.

Of crucial importance is the choice of editor and his team. Dedication, erudition, honesty and impartiality are their hallmarks.

I recall Drs Anil Desai (then editor of *Neurology India*) and Homi Dastur (who helped him out) spending countless hours in the library of the Seth G.S. Medical College checking and re-checking references quoted by the author(s) of each paper submitted to them. (This was in the pre-computer era, when we used *Index Medicus*, *Current Contents* and other such bibliographic aids.) Such painstaking efforts guaranteed accuracy and elevated the standard of the journal.

Like the editors of most journals in India even today, they earned no payment for their efforts.

A colleague who is editor of a journal recently told me this: 'It takes up three hours a day and that is far too much for *pro bono* work. The combination of careless authors (25–100 errors that I locate in an article AFTER they have approved the proof), lousy copy-editing, disinterested referees (only 15% accept the invitation to referee—and even these need repeated reminders to submit their review) and yes, those who waste my time by not reading "Instructions to Authors".'

In the past there were other problems as well. Journals were published on second-rate paper. Illustrations were smudgy. Reproductions of X-ray images and histopathology slides demanded the eye of faith to identify structures listed in their legends.

Fortunately, at Seth G.S. Medical College, we had a combination of a far-sighted editor and an individual who was to change the face of medical journals in India. Dr Atul Goel, Professor of Neurosurgery, was appointed editor of *The Journal of Postgraduate Medicine* in 1997.

He sought the help of Dr Devkumar Sahu, paediatrician and alumnus of the medical college, who had shown interest in the art and craft of publication. The two, together, embarked on a series of changes. Art paper was made the norm. High resolution images were sought from all authors. Electronic submissions were encouraged for the first time in India. The use of professionals in page-making and electronic printing turned what was once condemned by some as a 'rag' into a journal of international quality. Illustrations were now crystal clear with nothing left to the imagination. Nucleoli, cytoplasmic structures, disease damaging the walls of fine arterioles, capillaries and venules, microorganisms, electron micrographs, easy-to-miss abnormalities in radiographs were now startlingly clear. An automated manuscript management system was set up to facilitate submission and handling of manuscripts. This predated similar efforts by many reputed international journals. Dr Sahu also helped construct and later renovate the journal's much appreciated website.

He went on to create the publishing house we now recognize as Medknow. Its pioneer role in championing electronic and open access publishing has made it one of the largest publishers of journals in the world. It was amalgamated with Wolters Kluwer in 2011 and is now active in China, the Middle East, and other regions as well. The list of journals now published by Medknow is over 479.

While publication of medical journals in India has come of age, the development of infrastructure, professional editors and editorial boards and a robust system for scrutinizing papers submitted for publication, with ruthless rejection of substandard papers regardless of the status of the author have yet to become the norm.

We still have a long way to go ere we can rest of our laurels.

SUNIL K. PANDYA