

Lecture/address by Prof. R.C. Deka, Director, AIIMS to MBBS students/faculty on 16/7/2012

Challenges before the Students of Medical Sciences

The Challenges before the students of medical sciences are indeed a very important subject. In the preparation to entry into the medical profession all aspirants should be exposed to an orientation of the facts and challenges that they would be facing as they progress in their careers.



The young girls and boys after their board examination face the most difficult challenge of making a decision for a career in the practice of medicine and then to take the entrance examination to be selected for admission into a standard medical college/institution. To achieve this, they need to work hard on their own or through various coaching courses. The latter entails heavy fees depending on the popularity of a coaching centre. It has become a big problem both for the students and the parents. Ultimately, the success depends on the hard work and general standard of a student having right aptitude.

Once admitted to a medical college, they face purely a new pattern of teaching, with new teachers for subjects like anatomy, biochemistry and human physiology. These are significantly different from their courses in their schools. They are required to adapt to different methods of teaching and learning. Socially they are exposed to mostly an urban environment as most of our medical colleges are established in urban centres. Many of the students take reasonable time to adjust to such a situation since they come from rural background. This is a socio-cultural challenge which many find difficult to adjust to.

In the meantime, both theoretical and practical classes begin in all three basic subjects and even they are required to undertake some topic-based assessment. The assessment is always done by teachers and demonstrators in English which again creates a barrier for many students who are not well versed in the language. This is a big problem. In our country we do not have provision for upgrading the language skill of the students in medical colleges but this is an important challenge. The students are required not only to understand the subjects through English medium but also to remember hundreds of medical jargons from textbooks.

Many of us presume that any student cracking an entrance test would be fairly proficient in English but the ground reality is different. For most of the students, coming from diverse schooling background, communicative English is a very difficult challenge. Firstly, they may not properly understand what the teachers taught and even if they do, they are unable to express well in spoken language. As a result they score less during assessment. I am strongly of the

opinion that medical colleges in our country should provide for communicative English language skills training as a necessary co-curriculum, of the students in the first two years of the course.

During their clinical training they not only need competency in professionalism, patient care and problem solving abilities, but also they need to develop communication proficiency for building trust between patients and doctors. They are required to listen to patients and communicate with them on their levels of communication. They also need to be exposed to history of medicine and humanities, including sociocultural inputs. These are a difficult set of challenges.

There has been rapid advances in science and technology in recent decades and this has put students of medicine additional burden to acquire them well for practice of modern medicine proficiently. The students of medicine today not only need to learn modern medicine in the context of clinical or curative medicine but they are also required to acquire knowledge and management skills of public health issues prevailing in India, including mental health problems, increasingly seen in the country. This is a huge challenge before the students.

Computer science coupled with technology innovation has completely changed the face of medical practice. The new doctor is expected to be computer savvy and should adapt to the new technology at the earliest. The new doctor's professional growth would depend on his level of curiosity to learn more in the emerging areas like imaging and technology platform-based diagnostic methods and newer pharmacogenomics, proteomics and metabolomics. He has to build and acquire such competence in clinical medicine that he becomes capable to serve his patients with the new technology and available pharmaceutical molecules. This is a challenge for every medical student but the problem is more for the students with inadequate or no exposure to the new technology. So proper infrastructures with technology driven equipment are to be established in teaching hospitals and colleges for the medical students so that they get proper exposure and training in the emerging areas of health care sector. Maintenance of standard and quality of teaching hospitals is one big challenge for the government and society. To produce quality doctors through due training by qualified and experience teachers is another problem today in the country due to huge shortage of medical teachers. We need to make a solution of this problem. We may have to use technology for e-medical education in the near future.

Medical profession is primarily for the people and is dependent on the community for its growth. Neither a doctor can practice in isolation nor a community can do without a doctor. Moreover, in a welfare society, every profession is expected to contribute something more to the community over and above its call of duty. In this context, doctors have a much greater role to play since their service benefits a needy individual directly. Hence it is important to develop a community orientation approach among the new doctors. The rural health sector in India is in a very bad shape. Access to health care for basic and primary diseases such as diarrhoeas and

respiratory infections is not available for a large section of our rural population. It is the responsibility of all medical professionals to ensure that every Indian has access to primary health care. There has been a visible change in this during the last few years since the Government of India introduced the national rural health mission programme.

Although, in the MBBS curriculum, it has been made mandatory for students to work in a rural area for a few months before they get their degree, it has not made any significant impact in the rural health sector. I think, we need to make rapid changes in this aspect and to give the students and teachers more rural exposure and to enhance the rural medical infrastructures and also to create some different career pathways in rural India for doctors, nurses and paramedics with a view to improving the quality of health care for the people in rural India. We need to have a broader debate on this subject and evolve a strategy for a solution.

A good doctor has to be a student for the whole life. Doctors need to upgrade their knowledge and skills regularly. This is particularly important in the present time when technology is developing very fast and there is an explosion of information and new knowledge. Research and innovation are integral to any scientific pursuit and more so in practice of medicine. Disease dimension and health care need especially for non-communicable diseases like cancer, diabetes, chronic pulmonary and cardiovascular conditions are increasing in India due to improved longevity and modern living. Needless to emphasize that the medical students need to have an aptitude for research and innovation and strive to undertake such projects to provide local and affordable solutions in medicine. We need to expose them to research and innovation environment early in their MBBS course itself. Say by introducing some summer fellowship/scholarship system for them to learn and undertake elementary research.

As we move towards another century of learning and teaching in health sciences, medical students through their institutions or on their own should learn and dwell on two important subjects which are not yet in the curriculum of Indian medical education. These are 1) Social determinants of health and 2) humanities including ethics in medical practice.

In a country with wide disparities in socio-economic standards of life, practice of medicine cannot be a pure text book science. The treatment that works, by merely following a prescription, for a well fed urban child, will not work on a malnourished rural child. One has to understand the socio-economic conditions under which this poor rural child lives and eats. One should strive to correct it, in whatever way it is possible, to improve his/her nutrition if the child has to survive without repeated health problems. Provision of clean water and improved sanitation is another problem in India. The subject dealing with these kind of problems is called the 'social determinants of health' and I hope in the near future we will have this as compulsory subject in our medical curriculum.

The second subject, "Humanities and Ethics in medical practice' is touched upon often but we are seeing a significant level of decline of it, being practiced these days. This is a big concern in

the society. All those training to be in the medical profession should be indoctrinated in humanities, ethics and integrity failing which we will become another branch of commerce. This is another subject that should be approached as a co-curriculum by institutions till such time it becomes part of main curriculum.' Patient Safety' should be foremost in one's mind, whatever we do in medical practice.

To practice medicine, it requires a lot of hard work in developing clinical and practical skills, building competence with confidence, learning attitude, willingness to serve and do public good, and commitment to humanities and the professional ethics. The spirit of doing public good itself is, I think a great motivating and inspiring force for the young minds. The students must be told about it.

At the end I must say that it is a very challenging profession but also a highly satisfying profession. One must enjoy doing it well.

Friends, Ladies and Gentlemen, thank you so much once again for your kind indulgence.
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