

## ARE WE READY TO REVAMP OUR UNDERGRADUATE MEDICAL EDUCATION?

---

“My medical education began three times. What I learnt at medical school was no use in the hospital. What I learnt in the hospital was no use in general practice.”

*Julian Tudor Hart*

Dr. Charles Boelen, Chief Medical Officer for WHO's Programme on Educational Development of Human Resources for Health in Geneva, published an article entitled “**The Five Star Doctor**” in the June 1993 issue of the WHO Journal of “Changing Medical Education and Medical Practice”. The five-star doctor is a care provider, decision-maker, excellent communicator, community leader and a good manager. Does the current system of undergraduate and postgraduate medical education is capable of producing such five star doctors remains a question to be answered.

I have been in active clinical practice and teaching for the last twenty five years and am among the fortunate few who have seen the undergraduate as well as postgraduate medical education system very closely. I feel honored for being affiliated with one of the premier medical institutes of the country so understandably the quality of medical education at present should be considered as among the best in business. I am aware of the fact that the current mechanism of teaching as well as training of students has stood the test of time but what continue to intrigue me remains the failure of the students in putting the medical knowledge into bedside medicine for the ultimate benefit of the patients. In the following lines, I will try to put forward a few new innovations in medical educations that remain in practice across the world.

Pakistan is one of the underdeveloped capitalist countries, where the health care is purely care oriented, meekly preventive and primarily for the elite class. I feel that the systems of health care and medical education are not in line with the real needs of the community and of the country. This is still the problem with our medical education that we focus on what others do rather than developing our own curriculum in the light of local needs.

Curriculum is the skeleton of a subject, without which the muscles and organs will leave their place demolishing the structure. Globalization has led to free availability of new ideas and information, which pours in continuously. It is, therefore, essential to update curricula by utilizing the recent developments and research evidence in the different fields of knowledge. Curriculum is defined as, “An educational plan that

spells out which goals and objectives should be achieved, which topics should be covered and which methods are to be used for learning, teaching and evaluation”. The Standard Operating Procedures for curriculum revision are followed by HEC in which the National Curriculum Revision Committee is responsible for the revision of the curriculum. HEC has developed procedures and guidelines for quality assurance and its enhancement for the university administration for easier implementation. Medical schools in Pakistan, organized on the British model of medical education, have followed a static system in pre-clinical education, led by didactic lectures based on passive learning. This method has almost phased out in their setup but remains in vogue in Pakistan. This I believe remains a core issue in underutilization of the intellectual development of the students. PMDC should take a lead in initiating a consultation process for updating and rationalizing the curriculum in line with the recent up surged demands.

Problem based learning (PBL), ever since its arrival on the international stage has recently started gathering marked attention in Pakistan. Success of PBL depends on proper implementation based on administrative and logistic conditions. Pakistan is a developing country with limited resources. Therefore, implementation of a successful PBL curriculum remains a challenge for medical schools. Evaluation of PBL programs and comparison with conventional learning is the key to reporting improvements. PBL if implemented in letter and spirit will help raise medical students who will be able to put into practice the medical knowledge for effective patients care. PBL initiation requires more staff and PMDC can enforce this system by declaring it mandatory for all the affiliated institutions knowing that individual institutions will resist it because of the cost implications.

Students of the problem-based learning curriculum found learning to be more stimulating, humane and engaging, difficult but interestingly useful, whereas students of the conventional curriculum found learning to be non-relevant, passive and always boring. Students who use the problem-based learning method show better interpersonal skills and psychosocial knowledge as well as a better attitude towards patients. Students using the conventional model of medical education do perform better in basic science examinations but lag behind in bedside medicine. Teachers tell me that they tend to enjoy teaching the newer curriculum.

I suggest final year of medical school to be purely hospital based and the students should spend all of their teaching time in hospital. This will potentially let them to see in practice what they read in books and will allow us to produce doctors who will have huge amount of confidence in the delivery of health care. Students can be divided in small groups and teaching mechanism can be devised in line with the needs. Teaching in small groups allow the students to understand well and if its interactive improves on their communication skills.

Another suggestion is about the squeezing of medical education to four years instead of the long and tedious five years which actually stretch to six years in real time. All over the world in UK and the USA have four years of medical school and have now even started experimenting on even three years of medical education. Four different states including New York and Florida in USA are running a pilot project after recruiting 10 medical students in each medical school in three years Programme. The results of such an experiment will be very interesting. Squeezing the medical education to four years will address the issue of acute shortage of doctors besides reducing the burden on the students who are always complaining of the taxing nature of current medical education.

The current examination system in practice also remains an area of deep concern. Students currently are evaluated on the pattern of essay type questions and recently introduced MCQ types making one third

of the evaluation process. All readers will be aware of the fact that all the postgraduate examination both local as well as international uses MCQ, OSCE or the recently introduced Extended Match Questions (EMQ) as a method of evaluating doctors. This system besides being well thought out and evidence based, has the beauty of checking the thought process and inculcates the decision making habit in the medical students. This also removes the bias that medical students are found reporting in the checking of the papers. Our medical students remain naive to this system of examination and tell me that they do feel pressured to cope with. It doesn't necessarily mean they lack the required knowledge but their thought process is not tuned accordingly. This is high time that we completely abolish the current evaluation system and introduce the OSCE & EMQ type questions.

I understand the fact that few readers will find the suggestion put forward to be not as fascinating as they appear to me but I have tried to play the role of whistle blower and sensitization of those who are at the helm of affairs. I remain receptive to any healthy comments and criticism.

**Prof. Dr. Mohammad Humayun**

Professor of Medicine,  
Khyber Medical College, Peshawar.  
E-mail: drhumayun10@yahoo.com