Voice of the Expert

Medical Education — Vision 2030

1. How medical education evolved after independence in India ?

Post-independence initially government medical colleges were more. We had 23 medical schools in 1947. Today we have the largest number of medical colleges in the world. There are 529 colleges with 70,970 MBBS seats across the country. Since 1988s the private medical colleges have increased and some of them provide high quality education with excellent facilities. The government medical colleges in public sector have done a great service however decision making has to be rapid with the changing pace. The hostels need improvement and modern technologies of education need to be incorporated. The private sector medical colleges contribute significantly although the admission process in some of them needs to be regulated more and made transparent. Medical graduates from India have the best reputation world over, this is since the level of education is good in our country. In future the public and private sector need to work in unison and cooperation with greater respect and faith in each other.

2. Do you think approach &attitude of doctorshave changed in last 70 years?

Definitely. The society has changed so much that it was bound to bring this change in us. The young doctors realise that they are working in a more demanding, transparent, and audited times. The consumer protection act with started 1987 has made them more cautious. They realise that proper documentation is important. Also, the corporate sector has come into the system and they must adapt accordingly. With some new rulings the 'Single person clinics' which are an excellent model of cost-effective medical care delivery at the doorstep will become more difficult to maintain. Hence, they are adapting to these new challenges and are now changing to collective and group practice which is the way to go now. If we learn from the west specially USA, the doctors have group practice there. There is sharing of responsibilities and resources and so there are less pressures. I would say with the changing time and challenges they are modifying their practices accordingly.

While the USA system has its advantages, we have to think in the Indian context also. USA is a country which allows free enterprise and promotes commerce in any form. But in India, starting a business venture is never easy due to a lot of socio-political, economic and other factors. Hence, a few doctors forming a business group will not be easy.

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3. Do you think the reform of medical education is necessary in India?

Change is the only constant in the world. A lot of reforms have been made in the curriculum in the last 15-20 years. Most of them have been for the good. The occurrence of NEET which brings uniformity across the country for admission is the best thing. The national exit test (NEXT) which will start from next year is equally good. The final year exit exam will now be used as the basis for postgraduate admission. This will allow students to learn clinical skills during the internship. The initial induction course is also an excellent change from the past. The new MCI/NMC curriculum is competency based and recommends shift from didactic lectures to small group discussions, problems-based learning, role play, skill assessment, integrated teaching, demonstration, and emphasis on bedside clinics. We should lay more emphasis on clinicals in the third, fourth and fifth years. The skill labs have now been made mandatory by the NMC and will help in this direction.

4. What are the other lacunae present in the curriculum?

I do not feel there are many lacunae in the curriculum. I personally feel we have made many changes for the good, in it. The new proposed

competency based medical education (CBME) is more learner centric. There is a shift from the earlier pedagogy pattern to the more participation andragogy pattern. It will use the Miller's pyramid from cognition to performance stage of "knows, knows-how, shows how and does". It will be having more learner participation. The examination system still continuous to be the same for every professional yearly examination. We should not change from long answers to MCQs since many skills can not be tested by the MCQs. The aptitude of the medical graduates needs to be given greater value. We will have to depend on the judgement of the teachers and should provide them with some discretion to pick up students who may not scoring in the MCQs but have the desire and the aptitude for a particular speciality.

We think that the guidelines for recruiting medical teachers should be eased in India. For example, in all major western universities, which are ranked within the top 100 institutions of the world, there are visiting lecturers, who are essentially independent experts who are attached to the university part-time. But in India, such a concept is not there till now in the medical education. As the curriculum changes, there is need of more teachers. So, such recruitment procedures should be changed.

5. Do you feel present curriculum in Medical Education is adequate to combat future epidemic orpandemic?

The present pandemic has come after 100 years of the previous equally large 'Spanish flu' in 1918, towards the end of the second world war. The medical curriculums all over the world obviously were not emphasising on the special requirement on the medical care delivery chain during a pandemic. We started imagining that these epidemics are a feature of China or African countries. We now realised that with globalization and excessive travelling the world has become one and diseases will spread rapidly across man made borders. I am sure every country and so also ours will now have a special area of curriculum for the pandemic situations.

6. Technological advancement vs Clinical Skill – where should be the pivot?

This is an interesting question specially for the young graduates. Benjamin Franklin said, "Education is not the learning of facts but training the mind to think". We must train them to preserve the clinical skills and imbibe new technologies. The two are complimentary to each other. There is no reason to pick one over the other since someone who can use technology and has the clinical skills will be the best. Good history taking and physical examination will never ever the replaced, even with advanced artificial intelligence. On the other hand, the wearables and other gadgets that provide continuous information about the patient are providing useful information about disease progression. A smart doctor will be one, who maintains the clinical skills and learns how to use technology for the benefit of the patient and for better outcomes. Since, the ultimate purpose and aim of anything that we do is better patient care and outcome.

7. Where should we give stress in education : On communicable or non-communicable diseases ?

India is presently going through a double whammy. In the phases of epidemiological transition, we have a unique problem that non communicable diseases (NCDs) are increasing. More than 50% deaths in our country are due to the NCDs. Cardiovascular diseases cause 25% of the deaths in our country. With increasing longevity of life these NCDs have become more important. The present longevity for an Indian male is 67 years and for female 70 years. At the time of independence, the median longevity was around 45 years. The non-communicable diseases like dengue and other tropical diseases are still very common in our country. The COVID-19 pandemic has brought viral infections into the centre stage. Looking at all this, I feel we should continue to lay stress or both NCDs and communicable diseases.

8. How we can bring change in attitude of the doctorswhich is compatible with the future needs ?

The national medical commission (NMC) has started an induction course for fresh entrants into MBBS. This course emphasis on soft skills and there is ample time for discussing with young future doctors about these. The AETCOM (Attitude, Ethics & communication) module is being incorporated in the medical curriculum now by the NMC. This will be across all years of the MBBS course and medical ethics will be taught uniformly. We need to make them

realise that this is the most noble profession, and they have a great responsibility to carry this legacy. The change will come if we as teachers and practicing doctors become role models for the youngsters. Each one of us should realise that the future generation will follow what they see us doing. The future for them has great potential but there are significant challenges as well.

9. Do you feel in coming days Indianeeds more primary care or super speciality doctors?

Definitely, more primary care physicians. The way we are increasing postgraduate seats we will be left with few primary care physicians. Primary care needs much wider knowledge and astute clinical skills. The primary care physicians have to be considered at par with specialists like in UK where the GP is the most important person.

In the NHS, the GPs or primary care physicians are the best paid doctors in the whole system. This gives them the incentive to work more. But in India, primary care physicians are essentially left to fend for themselves with no government support and no social support. How can we encourage the youngsters to take up such a position?

10. Whether virtual seminars should be given new importance infuture curriculum.

Surely, the virtual seminars are a reality. The earlier a student learns it, better for the long run. The Massive Open Online Courses (MOOCs) are a reality. We need to integrate them into the learning process. Basic knowledge of computers, these communications portals, search engines and artificial intelligence is a must today. Electronic or online learning and face to face learning will now be used side by side. Such blended learning programmes will need strong institutional support and good internet connectivity. Patient care will not depend only on the ability to make a clinical diagnosis. Young doctors will have to be members of a healthcare delivery team with shared responsibilities and lot more use of technology.

11. What about virtual teaching methods:Should they becontinued even after the pandemic in over.

Absolutely. The virtual seminars are there to stay. The pandemic has been a major disruptor. However, as Abdul Kalam said, “Adversity always presents opportunities for in introspection”. They have significant cost saving, saving of time and freedom to switch on from home. Recording helps us to listen to them again. The cost of holding big conferences is enormous. As more portals develop these will become more interactive also.

12. Is training of senior teachers required about virtual *teaching method?*

Yes, to be digitally literate they will require training. Proper communication is very important. There should be no resistance to this change. They must transition to virtual student support and guidance using the e-learning platforms. The remote learning and online learning options need to be incorporated with ingenuity. If we do not exploit the potential of the various portals, we will only be using the basics. There is a need of simple articles in journals like JIMA and audio /video educational materials on these portals like Zoom, Google scholar etc.

In JIMA, we are planning to start a new monthly section on the use of current technology from January 2021. Please stay tuned.

13. Do you feel the doctor patient relationship has changed with the pandemic?

The pandemic has resulted in difficult times. The healthcare personnel have lost many colleagues. There is fear of their own risk and indirectly to the family. Uncertainly, crises and difficult times bring out the worst behaviour in some people. Due to all this, the doctor-patient relationship has been traumatised significantly.

On a positive note the pandemic has certainly brought healthcare to the focus of attention of the policy makers and the public. The IMA especially our President have represented the health care viewpoint very effectively on the national news networks. People now understand the difficulties of health care workers in a better manner. So, I would say there have been some positives also.

14. What measures should we take to improve the doctor patient relationship in future?

The doctor patient relationship was earlier viewed as one between a 'healer' and a 'sick person'. It is now viewed as an interaction between a 'care provider' and a 'service user'. It was earlier based on trust, loyalty and regards and so if improved recovery. Now the patient has become a 'consumer'. We must make the young doctors genuinely compassionate, caring and service oriented. The patients are better informed now, and we need to adapt. Transparency, open discussion, and patient participation in decision making has to be done. Anything hidden always raises doubt and should be avoided. The earlier 'Active-passive model' of the doctor patient relationship changed to a 'Guidance cooperation model'. Presently, it is a 'Mutual participation model' which places both at an equal level, we must let patients participate in the decision making and this will further improve the relationship. Besides this professionalism and good etiquettes need to be imbibed and practiced.

The cost of medical care is going up since effective but costly options are available. The patient should be given an idea of the exact cost that will be incurred and then allowed time to take a decision. These simple modifications will improve the doctor-patient relationship.

15. How the medical curriculum IMS (Indian Medical Service) will help to achieve this?

The Indian medical service system will ease the system of decision making. It will place doctors in the decision-making team and so obviously will be a great step forward in the right direction.

The IMS will help the doctors to have negotiating power equal to the bureaucracy in India. Now, doctors are their subordinates and must follow whatever the administrative bosses may order. Before independence, the doctors who were part of the IMS could take a lot of important decisions like starting a new department, increasing the number of beds in a hospital or recruiting research assistants. But now, even for these essential tasks, doctors have to depend on the administrative branch.

Thank you Dr Wander for your answers. We appreciate the time taken by you and we are sure that our readers will be benefited immensely.