MEDICAL EDUCATION IN INDIA: AN INTROSPECTION

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Medical education in India is at crossroads. The age old approach and structure of medical education leave much to be desired in meeting the rising challenges, both internal and external, to medical profession. As the challenges multiply, a new strategy is needed to drive medical education to the next level of excellence. The time has come to introspect whether to continue with the medical education system and curricula established over a hundred years ago or to take a fundamentally different course, guided by contemporary innovation and new understanding about the aspirations of the society and demands of the profession. A view has to be taken now if this paradigm of medical education can continue to meet the rising challenges, both internal and external, to medical education. An assessment of the prevailing situation of the medical and health care demands new approaches towards shaping the minds, hands and hearts of physicians. Fundamental change in medical education will require new curricula, new pedagogies, attitudinal changes and new forms of assessment.

IN ANY developing country with inadequate availability of health services, the requirement of expertise in the areas of ‘public health’ and ‘family medicine’ is markedly more than the expertise required for other clinical specialities. In India, the situation is that public health expertise is non-existent in the private health sector, and far short of requirement in the public health sector. Also, the current curriculum in the graduate/post-graduate courses is outdated and unrelated to contemporary community needs. In respect of ‘family medicine’, it needs to be noted that the more talented medical graduates generally seek specialization in clinical disciplines, while the remaining go into general practice. While the availability of post-graduate educational facilities is 50 percent of the total number of qualifying graduates each year, and can be considered adequate,
the distribution of the disciplines in the post-graduate training facilities is overwhelmingly in favour of clinical specializations. National Health Policy 2002 examines the possible means for ensuring adequate availability of personnel with specialization in the ‘public health’ and ‘family medicine’ disciplines, to discharge the public health responsibilities in the country.

The National Health Policy affirms that the effective delivery of health care services would depend very largely on the nature of education, training and appropriate orientation towards community health of all categories of medical and health personnel. It is, therefore, of crucial importance that the entire basis and approach towards manpower development in terms of national needs and priorities are reviewed and training programmes restructured accordingly. Besides there is an urgent need to reassess appropriate health manpower mix to deliver health services at primary, secondary and tertiary level and for the purpose of training and research. As much as approximately three-fourth of the total expenditure of health services is spent on personnel. Yet, health manpower planning, production and management, which constitute key elements for effective implementation of health programme, have not received adequate attention?

There is a growing mistrust among the public for the medical profession as one frequently hears of cases of negligence, misconduct, and unethical practices leading to legal suits and assaults. Unfortunately there is apathy among the medical and paramedical personnel to listen to the tales of pain or to conduct physical examination of the patients or to give any attention to their woes. There is definitely something wrong with our medical education system.

The problem is equally rampant in the public hospitals as well as private hospitals; passing the buck in case of former and greed in case of the later seem to be the causes. Poor quality of the training in medical colleges in clinical skills and lack of training in virtues like dedication, compassion, and ethics seem to be the additional causes. There is increasing public demand for the accountability, transparency and quality assurance from the health professionals. Healthcare and medical education (ME) are the two most neglected areas. Health sector is not a vote catcher for the Indian politicians. The doctors and para medics have lost connectivity with the ‘noble’ profession and most of them are out to make money by hook or crook and may be by not even touching the patient. On the other hand the expectations of the community to get service as their right to be served with devotion in public sector without payment or against payment in private hospitals, at par with other professions e.g. hospitality/aviation industry have risen. The minimum politeness and compassion with patients has
disappeared in the dealings of medical and paramedical staff. There is need to institute a course of orientation and sensitisation of every hospital worker towards the needs of patients and their attendants, at the time of entry.

The Challenges

There are several challenges on the path to better healthcare and ME viz. (i) to ensure sound basic health care to all communities, rural and urban, rich or poor. At present quality basic care is just not available to anyone, rich are cheated because they have more money and poor are denied because they have no money or say in the matters (ii) to address all common and urgent medical conditions, with limited laboratory and other facilities (iii) Medical students who are exposed to in the tertiary hospitals and not trained at secondary and primary levels of care or Family Medicine (FM); the lack of which is the foremost deficiency in Indian medical education today; (iv) need to prepare a good basic doctor who forms the backbone of a sound health care system, on the pattern of National Health Service U.K. and which India sorely needs. (v) Training and upgradation of medical teachers is critical to good quality of the doctors. When this happens, fewer demands would need to be made on the scarce and costly tertiary care centres like PGI Chandigarh, AIIMS New Delhi, thus enabling the whole health care system to function more effectively, efficiently and economically. Every medical college must have a well developed department of Family Medicine (FM) to treat most of the common ailments at a reasonable cost. Family doctors so produced must be sound clinicians capable of handling by themselves 90 per cent of the common medical ailments and emergencies. The prohibitive cost of healthcare in the corporate hospitals is producing a generation of debt ridden community and also bleeding white the insurance companies, who in turn are increasing the premium out of proportion and thus not able to play the role assigned to them.

(a) The Unethical Approach

The commerce in healthcare and ME has killed the art of physical examination of the patient and science of diagnosing by clinical acumen, while the need for affordable healthcare is paramount, since the percentage of BPL families is in majority in our society. A concerted effort needs to be made by the government and public agencies to promote ethical and affordable healthcare. There is a need to include ethics in medical teaching.

(b) Unnecessary Investigations and Avoidable Interventions

India is a developing country where allocation to healthcare is a meager one per cent of the Central budget. Adding insult to injury, the patients are
hardly given a clinical examination or offered primary healthcare and instead are referred for too many laboratory tests as well as expensive and often harmful imaging tests like CT SCAN. Large doses of unrequired costly medicines are administered with impunity and surgical procedures are done for extraneous reasons endangering the life of the patient and ruining the family financially.

Certain treatments and interventions include: use of large doses of branded vitamins, with similar formulations from different drug houses, advanced antibiotics for common cold or minor infections, blood transfusions, ear tubes for children, early-scheduled caesarean births or uterus removal, glaucoma surgery, cardiac stents, CT and MRI scans for simple inflammatory swellings, etc. The list is not comprehensive.

This speaks of lacunae in medical curricula as well as defective style of teaching and training in medical colleges.

We must find the method to achieve greater productivity, efficiency and cost-effectiveness in health manpower utilization. No society, especially the developing, can long justify investing years of education and training in individuals who later on perform rudimentary duties that could be achieved satisfactorily by people trained in half that time. The critical decisions in health manpower planning concern the kinds of personnel required, the type and adequacy of education and training and financial resources necessary to produce them, their relationship to each other in the health team, and where and how they would practice.

(c) Rhetoric in Planning

The state of medical education in India presents a scenario marked by rhetoric and wishful thinking rather than concrete steps. The present system of ME in India dates back to the establishment of the medical colleges in Kolkata, Mumbai and Chennai in early 19th Century by the then British Government. Resultantly, India is haunted by a mismatch between what is taught at medical colleges and the actual skills that are needed in the field. The drawbacks of the system include emphasis on theoretical knowledge and lack of differentiation of content into “must know”, “useful to know” and “nice to know” areas. The subjects like medical ethics, behavioural science, communication skills, and managerial skills do not receive any attention. A fresh medical graduate or a paramedic does not know how to approach a sick individual or his attendant and is often bureaucratic, rude and apathetic in behaviour. The new approach of depending on a host of expensive investigations, without proper examination is to be condemned. While shortages of doctors and paramedical staff are perennial, the need to inculcate adequate skills in the faculty of medical colleges and the field doctors is acute. The world average is 1.42 doctors per thousand and India’s
average is 0.65. Medical Council of India has set a target of one per cent doctor by the year 2031. While improving the numbers will be important, maintenance and improvement in the quality of the doctors with humane content is paramount. Increasing the numbers of doctors alone, without proper and adequate knowledge and skill will prove ruinous to the healthcare system.

(d) Lack of Infrastructure and Faculty

Even in most of the government medical colleges the requisite infrastructure and faculty strength is missing. It is estimated that there is a paucity of well-trained faculty to the extent of 30 per cent to 50 per cent. Even those present on the rolls suffer from inertia and lack of initiative to brush up their knowledge and skill coupled with administrative indifference of the power that be. Private medical colleges/hospitals are being used as money minting machines with no concern for patient care, medical education or research. There is a need for ensuring that well equipped hospitals are linked up with medical colleges before being approved for admission of students. There is also a need for better screening of students admitted to medical colleges under the “management quota” so that merit remains the paramount criterion. The present system of evaluation of the aspirants for MD/MS has also been found faulty, where the candidates specialise in passing the tests rather than understanding the clinical problems faced by patients and the community. There is also a need to ascertain the interest and aptitude of the students towards health care and patients, besides merit. Examination system needs several reforms; where the role of money and influence seems to be increasing. The never ending reservations based on caste or economic status is also telling on the quality of doctors’ training.

The government can open institutes of faculty development in premier Institutes like PGI/AIIMS for upgrading the skill of medical faculty or to produce new medical teachers, on the pattern of SIEs (State Institute of Education).

(e) Flaws in Admission, Teaching and Examination

Many a time extraneous considerations prevail and merit is given a go by at various stages of admission and examination. The tertiary care focus results in the use of uncommon conditions for assessment during clinical examinations. For example, mitral valve stenosis is a standard case for MBBS examination, while common conditions (diabetes mellitus, hypertension, fever, cough, diarrhea) are hardly used for assessment. Unfortunately, teacher training is the most neglected of issues in ME. The teacher’s performance is taken for granted and his or her competence in
teaching is never questioned. He/she is expected to possess all skills and abilities from the day he joins service, to plan the curriculum, make rational use of the media technology and design an assessment strategy. There is a need to set up faculty development institutes that will equip and empower teachers for discharging their professional responsibilities.

The objective of a good medical education should be to produce general practitioners, specialists, teachers and research workers. The factors governing this are the curriculum, medium of instruction, duration of course, admission qualifications, the examination system, teachers-students relationship, prospects of teachers and students, etc. Besides, it may be mentioned that the medical education should fit in with the needs of the country and the conditions prevailing there. For instance, 70 per cent of the population of India live in rural areas. The training given to the doctor should enable and motivate him to carry on his work among the vast masses in the villages. We have been designing out undergraduate and postgraduate medical education which can fulfil this basic aim.

(f) Lack of Clinical Skills in Fresh Medical Graduates

Some students may graduate without becoming competent in very basic clinical skills. Students should be able to diagnose common ailments without elaborate investigations and able to administer treatment locally to most cases without referring to a specialist. He should perform safely, confidently and effectively procedures like a venepuncture, setting up an intravenous line, give intravenous injection and obtain a sample of arterial blood and catheterise urinary bladder. Further, the basic doctor should know how to record an ECG, how to use a nebuliser, interpret and analyse reports of clinical investigations. Under surgical skills, the basic doctor should know how to perform a prostate examination and insert a nasogastric tube. Under emergency skills, the doctors should know how to perform advanced life support procedures, perform basic life support and know how to safely transfer a patient after an accident. Can the fresh graduate accomplish all these tasks?

Values for Medical Education:

- Presuming a high standard of professional and personal values in relation to patients and their care.
- Being available and accessible to patients.
- Maintaining a high standard of clinical competence.
- An ability to communicate effectively.
- An assurance to personal, and professional, development as a doctor.
- An assurance to professional audit and peer review.
An assurance to team working in multi-professional environment.
An understanding of the multi-cultural society in which medicine is practiced.
An enthusiasm for his/her specialty.
A personal assurance to teaching and learning.
Impressionability and responsiveness to the educational needs of students and junior doctors.
The capacity to promote development of the required professional attitudes and values.
An understanding of the principles of education as applicable to medicine.
An understanding of research method.
Practical teaching skills.
A willingness to develop both as a doctor and as a teacher
A commitment to audit and peer review of his/her teach
The ability to use formative assessment for the benefit of student/trainee.
The ability to carry out formal appraisal of medical students’ progress/the performance of the trainee as a practicing doctor

The Reforms Mooted by MCI
A common entrance test for all undergraduate (and postgraduate courses) has been mooted by the MCI. While the total duration of the undergraduate course remains five years, restructuring of the syllabus will include a foundation course of two months before the first year to prepare students for the MBBS course. Early clinical exposure is another important feature with clinical training beginning from first year. Medical colleges will also be attached with the local health system including the community health centres. At post graduate level, the board of governors plans M. Med. course of two years, as first level of specialisations, unlike the present system of direct M.D. (Doctor of Medicine) or M.S. (Master of Surgery) which will be equivalent to M. Phil programme. An Indian Medical Graduate Licenciation Exam starting 2013 has also been proposed by the Council which will be mandatory after 2017 for all willing to practice medicine in India. The status quo of MBBS exam will be however be maintained.

M. Med degree holders will be eligible to teach undergraduate courses. There will be no competitive exam for this course and the assessment will
be based on the student’s performance during the course and the national exit exam. An additional weightage of five per cent would be given to candidates for putting in six months of intensive rural service during the M. Med course. The duration after finishing MBBS course would be M. Med (2 years); one more year will get candidate an MD degree. After M. Med, students would have the option of pursuing one of the five doctorate streams depending on the aptitude and professional aspirations (MD-PhD, MHA, MD-DM and MD-fellowships). The MCI is toying with the idea of holding the PG entrance examination within two months of the completion of the MBBS exams; so that the students are done with preparing for the entrance and can sincerely concentrate on patient care during internship.

**Fear of Draconian Laws**

Medical teachers should be well paid and additional incentive of limited private practice be provided. There is a need to reverse the trend of disinterest in medical profession to undo the shortage of doctors. Fear of draconian laws also needs to be minimised. Increasing, legal and social vulnerability of the doctors is also contributing to disinterest in the profession. One hears of numerous cases of negligence, misconduct, and unethical practices leading to legal suits and physical assaults. While burden of several laws in existence or in the making weigh heavily on the minds of the doctors and would be doctors, the doctors are destined to perform heroic duties without assured returns or personal safety of any kind.

Recent judgement of the Supreme Court of India giving nearly 11 crore of compensation in a case of medical negligence speaks volumes about the need of inapplicability of Consumer Protection Act to the medical profession. The compensation should be a percentage of the sum paid by the patient/ received by the doctor, and not astronomical! Will it not lead to further deterioration in services and sharp increase in charges by the hospitals? It may also force small clinics to close down, since they cannot provide world class equipment and amenities to its patients-the lack of which may lead to compensation claims! Newly applied Clinical Establishment Act, mandating the provision of all emergency facilities at all clinics round the clock will also contribute towards the deterioration of healthcare. Most of the patients with minor and uncomplicated cases require only history taking, physical examination and honest advice and in case such facilities are closed for fear of law, what will happen to healthcare?

It is necessary to appreciate that the effective delivery of health care services would depend very largely on the nature of education, training and appropriate orientation towards community health of all categories of medical and health personnel and their capacity to function as an integrated
team, each of its members performing given tasks within a coordinated action programme. It is, therefore, of crucial importance that the entire basis and approach towards medical and health education, at all levels, is reviewed in terms of national needs and priorities and the curricular programmes restructured to produce personnel of various grades of skill and competence, who are professionally equipped and socially motivated to effectively deal with day-to-day problems, within the existing constraints. Towards this end, it is necessary to formulate, separately, a National Medical and Health Education Policy which (i) sets out the changes required to be brought about in the curricular contents and training programme of medical and health personnel, at various levels of functioning; (ii) takes into account the need for establishing the extremely essential inter-relations between functionaries, of various grades; (iii) provides guidelines for the production of health personnel on the basis of realistically assessed manpower requirements; (iv) seeks to resolve the existing sharp regional imbalances in their availability; and (v) ensures that personnel at all levels are socially motivated towards the rendering of community health services.