

Mal-distribution of Medical manpower resultant decay of the Indian medical education system: Existing problems and possible solutions

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Abstract

Indian medical education system has seen rapid growth in the last two decades. From a miniscule number, private medical colleges have grown to account for more than half of the 270 medical colleges in 2008 and consequently, India has the highest number of medical educators in the world. This unregulated unequal growth brings two issues to focus: the failing quality of medical education and implementing effective solutions to address an artificial faculty shortage due to doctor mal-distribution. The menace posed by the growing merchandisation of medical education has to be warded off and efforts should be made to ensure maintenance of standards and check the unplanned growth of substandard medical colleges and substandard education norms in universities or their constituent medical colleges. There is a strong case for a review of the entire system of medical education and examinations in the country. Some solutions like increasing retirement ages of MD faculty to 70 years, sharing of faculty, increasing MD seats, allowing clinical MDs to teach paraclinical and preclinical subjects or temporary merger of specialities have been proposed to address the faculty shortage instead of relying on inadequately qualified MSc non-medical faculty.

Keywords: Qualified Medical teacher, India, medical colleges, faculty shortage, Medical Council of India (MCI). Abbreviations DCI=Dental Council of India. MSc=Master of Science

Establishing a medical college is not similar to establishing a science or Arts College and apart from a huge capital requires a huge number of qualified, competent, MCI compliant manpower to produce quality doctors.^{1,4,7} Having established a Medical College, maintaining the standards of education to world acceptable levels with a vision to serve poor Indian masses has been a concern of the Indian planning committees. Also, the good name a college attains is due to the accomplishments of its faculty and alumni. In that regard, proper emphasis on the quality of medical education, in spite of the recent rapid proliferation of private medical colleges, has rightly been the working domain of Medical Councils all over the country and has consumed energies of Medical Council of India over the last forty years.^{1, 4, 7, 10, 12}

The Medical Council of India (MCI), the regulatory and advisory body on medical education, approves medical curricula and permits medical school existence and allows for recognition of medical degrees issued by various universities. The accreditation process for medical schools focuses largely on the infrastructure and human resources required and little on the process and quality of education or outcomes.¹⁵ The implementation of the recommendations of MCI regarding recognition or de-recognition of a medical college is governed by the Ministry of Health and Family Welfare, whilst individual universities also have variable sets of regulations for their affiliated medical schools. As a result, there is no uniformity in the standard of medical education across the country. At the time of independence there were just 19

medical schools with an output of 1200 doctors.¹⁰ In 1965, there were 86 medical colleges in India with only a few private colleges.⁷ The college total increased to 112 by 1980 (at a rate of 30%), to 143 in next decade (rate of growth of 28%) and since 1990 over past 18 years the number has increased to 271, an increase of ~90% compared with the figure in 1990.⁷ Today, there are 271 medical colleges out of which about 31,000 medical graduates pass out every year and private sector medical colleges have grown to account for more than half of all medical education institutions in India.¹³

Evidently, medical education system seems to have had an unregulated growth over the last two decades. It has been pointed out that even the prestigious colleges' window dress faculty lists or put up names of non-existing academic members in their staff list.⁵ Most medical college permissions were gifts given out as largesse or patronage to political heavyweights from health ministry.^{1, 14} Very few have had adequate space, laboratories or hospitals as per MCI norms. They were and remain ill-equipped and inadequately staffed.¹⁰ This unregulated rapid growth in enrolment of medical students and poorly implemented regulations relating to admissions, faculty strength and infrastructure in medical colleges adversely impacts quality of training in India's medical institutions.

Many reputed physicians and surgeons, professors, directors and deans working in new private medical colleges fabricate and falsify records like even birth records and lie to the MCI and the courts in order to get their medical college of questionable

standards approved or recognized. Illegal money is involved in the business of getting new private medical colleges approved or recognized by the MCI and the health ministry. The decay of medical colleges reflects the general trend in this country.^{4,5} Corruption and bribery have made permanent inroads into medical education since past few decades in health universities or entrance examinations. Even clerks in the universities leak question papers and manipulate marks.¹ Perhaps the worst kind of gross unethical practice in academic medicine happens around the time of inspection by the Medical Council of India (MCI) post 1998-2000, in new private medical colleges. In emergency-like frenzied two day shows, busloads of patients are mobilized to fill up empty wards, carloads of doctors are paraded before the inspectors, and even instruments are hired or shifted between colleges, during the period of MCI inspections.⁴

Privatization in general has been known to increase the gap between rich and poor, amounting to encouraging survival of the richest which cannot be an acceptable goal of any civil society.⁸ And, the policy of excessive privatization of medical care delivery system has undermined health services and further limited the access of the underprivileged.^{3,8}

Privately, many managements agree that it is very difficult to get faculty and that it is even more difficult to retain them in the wake of continuous offers or lure from newly established medical colleges. Certain medical college locations in smaller cities or semi-urban areas do not have facilities, ambience, or charm of big cities hence attracting teachers or other qualified staff to such medical colleges has been difficult, and various inducements have been applied. Such colleges have been surviving council inspections by window dressing or luring faculty with money. In certain new colleges which are literally brick fresh, bereft of hostel or quarters or other amenities the teachers delay even more to move or settle down themselves. At times doubts are established whether an impossible set of conditions and heavy financial burden is imposed on Medical college managements, by the MCI just to make management fail MCI inspections, but at the same time, some stringent MCI regulations have helped faculty of Medical colleges by ensuring job availability.

Doubling of medical colleges over last 15 years has improved the number of medical practitioners in India, but will the mere increased numbers mean a higher quality health care delivery system is debatable. Most management fail to fulfill the excellent set of norms stipulated by Medical Council of India. It is worthwhile, in national interest to note that, we have been losing medically qualified post graduates to Western countries since till recently Medical College teaching jobs were low paid and did not give that richness or respect attained by private practitioners. After the Karnataka Government & Pondicherry scales new implementation in 2007, with a heavy Non Practicing allowance teaching profession has gained respectability vis-à-vis elite in society like software engineers.

Similar uniform pay scale implementation is need of the hour, all over the country to prevent medical teacher mass migrations.

Nearly 27000 teachers are required as per Ananthkrishnan's calculations⁷ to fill the faculty positions in 270 medical colleges purely for the purpose of teaching MBBS. He ignores the existence of ~300 Diplomate National Board hospitals across India and requirement of faculty for DNB courses. He also ignores MCI recognized institutions exist in other countries like China, Nepal, Malaysia, Netherlands and have been training MBBS doctors of Indian origin. All these institutions have been drawing medical teachers to satisfy MCI or DNB stipulations for accreditation. Hence we have to account losing faculty to such Institutions. Also his manpower calculations are only for colleges purely teaching MBBS and ignore multiple course Colleges like KMC Mangalore, Manipal which harbor 90 MSc students per year per department and ignores existence of PhD students which evidently will require more teachers. He also ignores the net strain on the same faculty who are simultaneously teaching BPT, MPT, etc in allied institutions. A great academic strain on medical college teachers, exists, which has never been accounted by MCI nor by Dr Ananthkrishnan. So, on the whole, it means that a great qualified medical teacher shortage exists in India. Either it is due to the excessive number of courses imposed on the same faculty or maybe it is inefficient use of existing qualified medical teachers for non teaching purposes.

Contrary to the opinion of Health ministry, eminent educationists Sood & Adkoli point out that the doctor: population ratio has already exceeded that required by the country and there is mal-distribution of their services. They feel that the menace posed by the growing merchandisation of medical education has to be warded off and efforts should be made to ensure maintenance of standards and check the unplanned growth of substandard medical colleges and substandard education norms in universities or their constituent medical colleges. This mal-distribution of medical manpower is the centered on biased political will and seat purchasing power in the community. With the correction of medical manpower maldistribution medical standards will harmonize throughout India.^{11,12}

Indeed, given the sharp increase in the number of medical colleges and the doubling of enrolment capacity after 1980s it is difficult to imagine that enough trained full-time faculty exist to adequately staff the newly created colleges or DNB Hospitals and maintain reasonable teacher-student ratios.⁹ Dr Ananthkrishnan proposes to allow MSc from Non Medical Universities to teach Medicine.⁷ It will be gross medical impropriety to allow such injustice to be allowed by Medical council of India which is supposed to uphold medical education standards across India. What glory does it give Indian medical education system to have a bunch of unqualified non medical doctor MSc teacher's seeking to run coaching medical classes a la science tuition centers we fail to see. What is the necessity to

increase number of medical college, or medical college seats, in inadequacy of appropriate medical teachers? Is it possible to permit inadequately trained staff to run these colleges, and will the output reflect quality abroad? Emphasis here is not on excellent university results, these MSc teachers, produce by mere mugging up of unconnected facts or figures or excellent power point teaching but what MBBS educated teachers can produce by moulding young doctor student minds by bringing in relevant clinical experience.

Some Solutions

Today, India has the highest number of medical colleges in the world and consequently the highest number of medical teachers. Yet, shortage of medical faculty and lack of medically oriented teaching by appropriately trained MD faculty have tarnished Indian medical glory. The unprecedented institutional growth has created a national quality challenge for medical education and has resulted in varying standards across medical graduates. There is a national need for well-trained faculty who will help improve programs to produce quality graduates.^{5,14} Annual student intake is said to be a critical factor in assessing the requirement for teachers as per Ananthkrishnan,⁷ and should dictate the employment. A punitive MCI, DNB Board and vigilant state medical councils can act synergistically to decrease medical student intake in Medical Institutions where teachers are not ready to go or do not exist. MCI and DNB Board also need to do more for its medical teacher's- give them more respect, recognition, arrange for their pensions, gratuity, relieving orders or get involved in pay scale recommendations as no entity exists till date to safeguard medical teacher interests. Measures are required to ensure private medical college's proper regulation by the medical council. Further, Indian Health ministry has been known to interfere in the functioning of MCI, DCI and DNB Boards, override MCI, DCI and supreme courts decisions and this is undesirable.^{12,14,15}

Increasing the retirement age of MD teacher's up to 70 years will harness hard earned medical experience of senior professors to guide preparation of efficient faculty and will reemploy retired teachers. This will also lead to discipline enforcement, more projects, PhDs and papers of relevance. Else, MCI can think of sharing of medical faculty among medical colleges, or dental colleges, and ensure less burdened teaching schedules. Implementing integrated medical education system-will help, as has been experimented in -KMC Manipal, Sri Ramachandra Medical College. Present paramedical system is a confused network of PhDs who have not enriched Medical education system, a proof of which can be the absence of a single Nobel laureate or international reputed medical scientist or of the glory of IISc departments, in 270 odd medical colleges across India, even Manipal, or AIIMS in spite of having the system for 50 years. Merging of homogenous specialities like merging of biochemistry with physiology or pathology, microbiology with pathology, or creation of a discipline of laboratory medicine

merging pathology, microbiology and biochemistry has been suggested in yahoo groups like mdbiochemists. Merging of homogenous specialities decreases the requirement of professors in biochemistry and microbiology by providing MCI norm requirements of professors from pathology. Also merging of Anatomy with Surgery will be worthwhile and achieve similar objective of providing deficient staff from Surgery department, who happen to be plenty. It is said to bring about some integrated medical education also. This cure is supposed to provide a broad based intermingling for net objective of efficient medical teaching by qualified professors, peers in interrelated departments. We would further extend their argument in suggesting that the proposed speciality merger need not be complete and final but a temporary arrangement for next 20 years.

Acute shortage of medical teachers needs to be filled. Appropriate solution exists within medical education system itself and help can come from recruitment of medical brethren from clinical sciences to fulfill non clinical department norms, as has been happening successfully, silently, without MCI approval, in Tamilnadu and Andhra Pradesh government medical colleges. A whole lot of MD or MS or DNB doctors are ready to serve as Medical teachers, but colleges have never used their teachership as MCI does not permit this. Many such part-time consultants who are practicing in community could deliver excellent teaching assignments and help tide over the so called artificial medical teaching crisis. MCI's generosity to allow MDs of homogenous specialties to teach in Pre or Para clinical sciences for a honoraria, rewards system will effectively, in a short time solve inadequate improper medical staffing problems forever. Number of seats available in various post-graduate medical courses is approximately 11,005 annually which is one third of MBBS graduates coming out every year. Nearly a third of these seats are diplomas and a diplomate cannot be considered for even a junior lecturer post like an MSc graduate, but will be considered for post of Tutor, the lowest cadre of medical teachership. Thus all DCP (Diploma in Clinical Pathology) and DFM (Diploma in Forensic Medicine) loose out Lecturership to their MD colleagues. Increasing the number of MD seats in Para clinical and preclinical sciences and replacing existing Diploma seats with corresponding MD seats is a just approach and should be the right approach for MCI to follow, since in contrast to before 1960s, in present days no postgraduate seat goes vacant-it means there are no shortage of MD aspirants as wrongly assumed by Dr Ananthkrishnan⁷. MCI also has to think of giving Junior lecturership posts to MBBS graduates who have been serving as tutors for more than 3 years in any department.

Continuing medical education

Thus there is a strong case for a review of the entire system of medical education and examinations in India. The American style of giving credits for demonstrable good performance throughout the years can be introduced. It will, of course, be

necessary to ensure objective evidence of such assessment and performance.^{1,8} The Indian Health ministry has realized that efficient medically qualified teachers are in the best position to mould young physician minds hence, Indian National Knowledge Commission (NKC-2008) proposes raising average standards and creating centers of medical excellence, revised medical accreditation; methods of attracting and retaining talented medical faculty members and devising measures to ignite, promote and sustain the research tradition in medical colleges and teaching hospitals.

Medical teacher incentivisation⁸, i.e increments, promotions, paid study leaves will also attract good teachers to stable institutions. In order to recruit good and gifted medical teachers, it is necessary to provide them with regular attractive salaries, amenities and retirement benefits which are realistic and at least on par with the earnings of those in practice.² Emigration of high quality physicians who could potentially serve as medical teachers in local Medical colleges may lead to further declines in the quality of medical graduates produced. To address regional inequities for medical training and related availability of doctors, firstly, it may be useful to set up adequately staffed medical research and training institutions in economically backward areas. Secondly, the government could subsidize the medical education of individuals living in backward areas, perhaps by combining such a subsidy with a bond to serve in the backward areas for a limited number of years. Implementing this bond system will be in the control of the health ministry.

For existing medical teachers, high standards of teaching are to be maintained and improved upon with constant seminars and workshops. Teaching aids, computers, medical CDs, DVDs, medical e-books, Internet facilities and availability of the latest journals and literature on the subject should be provided in every medical college or diploma national board certified hospital.² At the post graduate level, it is the duty of the senior teacher to train the young doctor so that he learns to perform according to accepted international standards.² As a long-term policy, no new medical colleges must be permitted in prosperous states, unless they demonstrate an MCI compliant infrastructure and facilities better than those in existing institutions. A revitalized Medical Council of India must be the only agency permitted to recognize such colleges and health ministry need not have any role.¹ Since advent of the MCI it has been noted that Indian health ministry can not only ignore a negative rating by Medical Council of India, but also openly defy the Supreme Court.¹²

India needs also a MCI controlled and Supreme Court monitored screening system of students admitted to medical colleges under the "discretionary management quota" so that merit remains the paramount criterion. This requires common entrance examinations to assess student performance across colleges, publicly accessible information on admission standards

practiced by colleges, including transparent nondiscriminatory ranking by performance, and enforcement of sanctions on colleges violating norms. A useful first step is the government policy of maintaining a accessible list of recognized colleges, but obviously much more needs to be done to implement ways to increase the supply of MD teaching personnel. Indian policy makers need to think proactively about developing a cadre of doctors focused more on medical education and research. Lastly, the Indian Medical Association, Association of Medical Biochemists of India, All India MD/MS Doctors Association, and other national medical and dental professional bodies must play a greater role to foster true medical and dental education and prevent governmental and political interference.^{1,12,14}

COMPETING INTERESTS

None Declared

AUTHOR DETAILS

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