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Perspective

Medical education in India: Problems and solutions

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ABSTRACT

Medical education in India is at an important crossroad; we can either continue along the same road which has not led us to a desirable place or we can turn along a path to a more contemporary, and relevant location. This article is a reflection on the background, the current issues and possible future course as I see it.

No one would dispute that all is not well with the medical education scenario in India. But then, the counter point is, is it well in any other sphere of education? At the outset, we need to acknowledge that doctors and healthcare delivery is part of the larger eco-system. While it may not be difficult to understand and identify the problems, or even suggest solutions, it is far more difficult to bring about the required change.

1. The origins

Indian medical education is the legacy of the Macaulean reforms, left behind by the British. At the time of their departure in 1947, there were 23 medical schools that offered undergraduate degrees. The degree was termed Bachelor of Medicine and Bachelor of Surgery (MBBS, a title also used in a few other erstwhile British colonies) in the English tradition, and it was recognized by the 'The Indian Medical Degrees Act No. VII of 1916'.[1] This was passed by the Indian Legislative Council "to regulate the grant of titles implying qualification in Western Medical Science". Most of the rest of the world recognizes formal medical training with the title of Doctor of Medicine or MD. The selection, training and examination of the candidates for the undergraduate (UG) and postgraduate (PG) education was decentralized and it was the responsibility of the University that was awarding the degree.

The IMC Act of 1933, provided for the formation of a 'Committee of Post-Graduate Medical Education for the purpose of assisting MCI to prescribe standards of post-graduate education for the guidance of universities and to advise universities in the matter of securing uniform standards'. Universities were to provide the post-graduate degree. This was in variance with the existing system in the UK, where the Royal College conducted examinations to certify specialist training. The Fellowships of the British Royal Colleges were recognized in India and highly valued, more so than the PG degrees of the Indian Universities. In the next amendment of the IMC Act in 1956, the Council under Section 10A, was vested with the power to give 'Permission for establishment of new medical college, new course of study' and ensure 'minimum standards of medical education'.

2. The expansion

The rapid increase in population and the consequent increased demands for health access could not be met by the available number of doctors. The slow expansion in medical seats in the 70s and 80s led to increasing frustration among the young people aspiring for these limited seats. In the early 90s, the adverse demand-supply situation was seen as a fertile ground for a profitable business model and private medical colleges

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started to emerge. Financial constraints led the Government to encourage this growth. Since then, the number of medical seats has grown from about 12,000 to almost 45,000 today.

This was also the period of rapid expansion of private medical care and corporate hospitals. In an already skewed supply-demand scenario, the supply to the lesser paying public sector, started drying up. Teaching jobs became the less favored options and so, the expansion UG colleges occurred in an era of teacher scarcity. In this scenario, a need for greater supervision of the colleges was considered desirable, leading to greater centralization of these powers.

The lack of a clear national policy direction in healthcare, and the general global trend towards curative medicine led to increasing demand for specialists. The postgraduate training opportunities were genuinely too few and to compound the situation, India as a mark of reciprocity de-recognized foreign medical degrees in the 70s. To fill the demand, the National Board of Examinations was established in 1975 with the mandate initially to conduct specialty examinations. This was a parallel stream to the University degree based training and a certification more in line with those in US, UK etc. Also, being a single national level exam, it was expected to achieve uniform standards in training.

The constant march of progress in medicine in the later part of the 20th century, also meant that even specialists could not meet the broad spectrum of skills demanded within the specialty. This led to the need for training in subspecialties and again, unlike our counterparts in developed countries, we opted to go for degree based superspecialty (rather than subspecialty) training, the DM/MCh courses. The DNB also started DM/MCh level courses.

The National Board utilized the capacity within a large number of stand alone private and non-teaching public sector (ESI, Railways etc) hospitals for imparting training. MCI did not to permit centers recognized for its PG training programs, based on availability of teachers, patients and infrastructure, to be used in parallel for DNB training. After, many years of dispute and discord, the two qualifications are held as equivalent for purposes of Government recruitment.

3. The current scenario

Currently there are 46,500 UG seats available in 362 colleges, of which 168 are in the Government sector. Although it is difficult to get exact figures, approximately 7.5 lakh students took the first all India entrance exam for about 43,000 UG seats in May 2013.[2] It is estimated that overall, about 10–12 lakh students would be taking the medical entrance exam each year and on an average each young person takes 7–9 exams.

Approximately 74–80% of the strength that enters, pass out each year. Due to a large backlog, (there are no restrictions on the number of attempts) over a lac of doctors take the exams for all of the 22,500 PG seats available across the country. Approximately 70,000 took the test for the 11,000 or so open quota seats in 2011. In addition there is now an entrance test for the 3000 odd DNB seats as well.

It does not stop here, as the demand for specialty training is also escalating. No one seems to trust a surgeon to do a prostrate surgery any more – it has to be the urologist!! With the changing public perceptions (mainly urban) and the national weakness for degrees, nothing but a DM/MCh/DNB (Specialty) will do. The MCI has obliged by increasing seats and also recognizing a large variety of specialties, such as DM in Organ Transplant Anaesthesia & Critical Care, Critical Care Medicine, Virology and MCh in Hand Surgery among others. Much of the decisions of expanding seats and recognizing new courses are arbitrary[3] This in a scenario where the MBBS graduate of the day does not feel confident to conduct a normal delivery or perform a simple surgery independently and in a country where the large majority of the people have no access to any trained medical professional leave alone a specialist.

In all of these numbers, we have not taken onto account the thousands of young people who take their training in foreign nations, ranging from Nepal and Bangladesh to Russia (and erstwhile Russian countries), China, Philippines etc. Since 2002, these graduates have to pass the Foreign Medial Graduates Examination (FMGE) conducted by the DNB.[4] Close to 15,000 appear for the test, held twice a year. The pass percentage is in the range of 20–25%, with graduates from Russia and China being the worst performers. This is a group which seldom even aspires to do post-graduation. The large numbers of graduates from Indian and foreign colleges who fail to get PG admission are a hugely disadvantaged community since the quality and nature of training leaves them without requisite skill levels to venture with confidence on their own.

The competitive entrance system works in favor of candidates from the urban centers, for both UG and PG seats. The boom in private colleges, with their high fee structure and system of 'promoter' seats, have further ensured that there is disproportionately low representation of economically disadvantaged groups (with a skewing towards children of doctors). It is not surprising that the large majority of these graduates do not want to serve in the public sector or go to the semi-urban – leave alone remote regions of the country. In fact, the huge resentment against any form of compulsory rural service is partly because of majority of graduating doctors being from urban areas.

4. The problems

4.1. *Lack of long term planning*

Although its obvious that the national health goals cannot be achieved without the required trained manpower, there is a disconnect between planning of health delivery and education. For instance, when the millenium development goal for maternal and child mortality needed to be met, it was realized that required numbers of gynecologists and pediatricians did not exist. The response was to immediately increase PG training seats in these specialties. But it takes 3 years to train a specialist and there is no guarantee that he/she will join the State services. More recently, the principle of Universal Health Coverage has been accepted in the XII Five Year Plan and we are into the second year of the plan without a road map for generating the required human resource. There is insufficient interaction between the health and education