Medical Education in India - Need to Rethink!

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Abstract

Sustainable Development Goal number three advocates for a healthy life for all and a significant part of achieving this is the availability of Doctors across all landscapes equitably. But there has been a lack of healthcare force, particularly in rural areas. The medical curriculum in India is exhaustive and emphasizes the need for higher education than serving as medical officers in primary health centers. Many aspects of undergraduate teaching are rarely utilized, if at all. So it’s high time to relook at our MBBS curriculum to incorporate more practical real-life education needed for managing primary health centers and cutting the extra burden.

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Medicine has long attracted the best brains available in society; hence doctors have been viewed as the cream among intellectuals and regarded as the noblest profession¹. Medicine is not only a profession but a passion². There are two broad domains as far as medicine in India is concerned; Allopathy and Alternative-Indigenous medicine, also known as AYUSH. The focus of this article is on allopathy medical education. India follows the system of Bachelor of Medicine and Bachelor of Surgery (MBBS) for bachelor & and Doctor of Medicine (MD)/Master of Surgery (MS)/ Diplomate of National Board (DNB) for Master, which are of three years. Two year Post graduate diploma has also been recognized in many disciplines as an alternative to a Master’s. Magister Chirurgiae (MCH) and Doctorate of Medicine (DM) represent the Super specialty and are akin to Ph.D. in other fields. Also, few institutions in India have permitted Ph.D. in different disciplines³. India has suffered from a lack of doctors as per norms and to cater to public demand, especially in the rural belt⁴, so pursuing MBBS ensures a govt job and secure life. However, the situation has changed significantly in the past decades, with many issues crippling medical education and the profession. Also, the rise in corporate hospitals owned chiefly by business people has changed the public perception of doctors from God-like figures to self-oriented money-making machines, especially in urban India.

MBBS is unique as it represents an assured carrier only after the 12th standard. Students enter the MBBS with broadly two sets of ideas. First, those without doctors in their family /relatives see this as
a noble profession sufficient for a quality livelihood superadded by parental pressure. On the other hand, those with physician relatives who joined MBBS to pursue post-graduation and super specialities from the beginning\(^5\) 408 from 271 medical schools. However, after the initial years in MBBS, almost all the students are forced to think that their life is of no value without post-graduation, which might be somewhat true but not the absolute truth. With nearly 20% of the peripheral hospitals without a doctor, an MBBS can significantly impact the Health Care System in these areas earning up to 12 LPA.

The MBBS Curriculum has 14 broad subjects for which they appear in exams. Other allied subjects are also taught, but no formal assessments are being done. The initial years cover human anatomy, physiology & biochemistry. Subsequently, they taught about pharmacology, pathology, and Microbiology. Forensic Medicine and Community medicine are covered in the third year. In the final One and half years, clinical subjects like Medicine, Surgery, Orthopaedics, Obstetrics-Gynaecology, and Paediatrics are taught. Second year onwards, the students are exposed to hands-on training in the outpatient departments & indoor wards, where they can interact with actual patients\(^6\).

There have been many attempts at charging the MBBS curriculum, initially five years followed by one year of compulsory rotating internship. The introduction of the semester system led to a curtailment of the tenure by six months of Nine semesters. Again, attempts were made to change the Curriculum to Competency-based medical education (CBME) four years back in 2018 to help produce better medical graduates\(^7\). Now another Googly is being tried by the attempted change in the medium of medical education based on Local Language, which has the potential to seriously hamper the performance of Indian medical graduates in the international scenario\(^8\). Another question we should ask is whether the curriculum is optimum for creating doctors to serve society. Most of the textbooks used in medical colleges across the country are written by international authors covering a wide range of conditions of the western world that an Indian medical graduate may never see in their lifetime.

Like in pharmacology, almost all medications being used currently are given in textbooks, including obsolete drugs. However, A MBBS will hardly use 10% of the drugs. They rarely use drugs for cardiac and neurological diseases and anesthetics in the Peripheral health institutions for which many study hours are spent. Instead, they should be taught about medication used in a PHC or CHC, focusing on essential medicines. A postgraduate in pharmacology can go through all the medical formulations in these textbooks, but there is no need to overburden the MBBS students. Similarly, in pathology, much of the time is spent on things that a medical graduate will not practice after passing out from medical school. Almost no MBBS will be making and examining slides in the peripheral hospitals; these are being done by the Pathologists who are postgraduates.

The same is true of Community Medicine, which seeks to instruct students on health management, monitoring & evaluation, prevention and control of public health issues, and the National health program in India. However, as described earlier, the textbooks suffer from similar faith to others. Reproductive, Maternal, New-born, Child, and Adolescent Health (RMNCH+A), National Vector Borne Disease Control Programme (NVBDCP), National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases, and Stroke (NPCDCS), among other programs, are dedicated to addressing the public health issues that are prevalent in Indian society and have the potential to lower morbidity and mortality there. However, these programs are non-functional in most medical colleges because of multiple factors that need a separate discussion. So practical exposure to these highly effective programs is not feasible during the MBBS tenure. Also, Community Medicine is supposed to be the gateway to research in the medical field by incorporating knowledge, skills, and attitude. But, it is hardly the case in medical schools. Instead, too much stress is given to insects, nutrition (theoretical aspects) & other topics that are of no use in the peripheral health institutions. The situation is almost the same in other subjects taught in medical colleges. An MBBS graduate practically cannot perform any surgery in PHC/CHC due to lack of practical exposure, lack of facilities in these hospitals, and legislative constraints as per the MCI/NMC act. So, devoting a vast amount of time to surgical subjects in medical schools is of no practical use to the graduates except for their Postgraduate entrance preparation.
The subject that needs to be delineated and taught is Emergency Medicine with practical exposure in the emergency departments, including labor rooms. The MBBS graduates will see general OPD patients or emergency cases (Convulsion, Poisoning, snake envenomation) after passing if posted in peripheral hospitals. So they should be well-versed in identifying the danger signs and stabilizing the patients before referral to higher centers.

Another serious issue is the unhealthy budding of private institutions imparting tuition to MBBS Students starting from the first year. These institutions are not only doing crores of business but also corrupting the entire generation of future doctors. MBBS period is not intended only to study books but to practice medicine, problem-solving attitude, and skill development in real-world scenarios. However, these institutions are brain-draining the students into mere students of MCQ Questions and answers rather than doctors. Students are bunking their MBBS classes in medical school to attend these tuitions. Govt should take stringent action against this kind of institution to keep the standards of medical graduates high.

**Discussion**

So there is an urgent need to relook at the Content of different subjects taught in MBBS courses, as suggested by many authors previously. The course needs to produce competent doctors capable of managing a PHC with a positive attitude toward society, focusing on the public health problems prevalent in the country. The specialties need to be rearranged based on actual and factual needs and not on the western curriculum. Reducing course content can quickly reduce the time required for graduation, which would also play a part in reducing the shortage of doctors in the periphery. Finally, the government is responsible for providing basic infrastructure and services so that doctors can render their services hassle-free to achieve sustainable health goals across all ages.

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