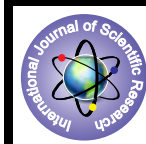


## What is the Relevance of MBBS Course in the Era of Specializations?



### Education

**KEYWORDS :** Undergraduate medical education, MBBS, Specialty, Medical education

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#### ABSTRACT

*With advances in medical sciences, medical education has expanded into various specializations and sub-specializations. The MBBS course which is the undergraduate medical degree has not undergone changes that reflect the increase in the specializations. As a result, it is time to rethink the purpose of undergraduate medical education in this generation. Can still the MBBS course alone be sufficient to deliver health care when both patients and graduates seek specialist care and education respectively? This article is meant to discuss some of the above issues.*

#### Introduction

Medical education in India is facing several challenges and changes at every step from admission to evaluation including reforms in curriculum are needed (Supe & Burdick, 2006; Jayakrishnan T et al 2012). Allopathic medicine has continually expanded for the past few decades into various specializations and sub-specializations with advances in knowledge and technology (Ananthkrishnan, 2011). This article is to provide an overview of the MBBS course and assess its relevance in this era of ever expanding specializations. An argument is also placed in favour of redefining the purpose of undergraduate medical education to suit the needs of health care administration.

#### MBBS degree

The entry into medical education starts with an undergraduate degree which is named as MBBS denoting bachelor of medicine and bachelor of surgery. The duration of the course is five-and-a-half years which includes a year of internship. This course is meant to produce medical doctors who can diagnose and treat common illnesses that are prevalent in our community. The student should have knowledge and competencies to provide basic clinical care to the people that he serves. The current curriculum gives enough scope to get adequate knowledge and training necessary to provide basic medical care (Sood & Adkoli, 2007). Students completing MBBS degree are eligible to do clinical practice. They could also choose to do any of the available specialization degrees at postgraduate level after MBBS.

#### MBBS course structure

The general scheme of the MBBS course is as follows. First year of the course is spent in learning basic science disciplines namely, anatomy, physiology and biochemistry. The second year of the course is for a period of one-and-a-half years where students learn para-clinical disciplines namely, microbiology, pharmacology, pathology and forensic medicine. In the third year, students learn ophthalmology, ENT and community medicine subjects. In the final year, there are four subjects that include general medicine, general surgery, pediatrics and obstetrics and gynecology. From second year onwards, students attend clinical postings in addition to learning the respective subjects in the respective years of study. The course also includes a period of internship for a year at the end of the course. During internship, students are trained in clinical departments of medicine, surgery, paediatrics, obstetrics and gynaecology and few elective postings to other departments. The medical student at the end of MBBS course is thus vastly exposed to many of the clinical and non-clinical departments (Sood & Adkoli, 2007).

#### Deficiencies in MBBS degree

MBBS course comprises of learning of about fourteen broad subjects as explained under the paragraph on MBBS course

structure. It is important to note that each of these subjects separately form a specialty course. Some of those subjects also include various subspecialties. For example, the subject of surgery in MBBS degree includes orthopaedics, anaesthesia and the subject of medicine in MBBS degree includes dermatology, psychiatry and so on. Due to the expansion of each of these sub-specializations, it is not uncommon to find recommendations to include newer branches of medicine or increase the training period in existing disciplines in the already cramped MBBS curriculum (Manickam & Sathyanarayana Rao, 2007). At the same time, some core knowledge and skills necessary for the practice of medicine are not imparted adequately (MCI Vision 2015). A balance can be achieved between these two issues if the objective of the course is well defined at the beginning and the course is tailored accordingly.

#### Redefining the purpose of MBBS course in the era of specializations

Education and training in MBBS degree should be broad based and must have skills which identify a medical graduate. As per the regulations of undergraduate medical education, it is proposed to produce an Indian Medical Graduate who could serve in the community as a physician of first contact and who could provide necessary preventive and curative services (MCI Vision 2015). This broad objective of the course sees the MBBS course as an end in itself that would enable the graduates to continuously upgrade their skills and practice medicine. However, unlike other streams of medicine, allopathic medicine is expanded into a number of specializations. In a scenario where both the graduates as well as patients prefer specialists in place of generalists, maybe it is time to expand the education and training of medical graduates as a continuum extending up to specialization degree (Shah, 2009; Sreekar et al 2014). Hence the objectives need to be clear as to what is the purpose of MBBS degree in this age. Is it to produce a competent physician who can practice independently? Is it to produce a graduate who has gathered adequate knowledge and skills necessary to enter into a specialty after MBBS? Is it to produce a graduate with basic medical degree who need not necessarily be eligible to practice medicine which can be reserved for those who specialize in a particular field but can pursue any of the related auxiliary field of medicine including health education, health economics, health management, specialist in bioethics, health research and so on?

#### Need for specialization

Increase in the medical knowledge has paved for the development of newer specialties and many fields are branching out from its parent course to carve itself a niche for specialty course. Many a times, MBBS course merely becomes a training ground to earn eligibility to pursue one of the spe-

cialties that the candidate might be interested in. There is also a need for the medical graduate of today to keep updated himself and achieve specialist knowledge and skills in a given specialty (Sreekar et al 2014). The people of today also demand specialist treatment and care. Moreover, given the complexity of the diseases, that occur today it has become necessary to have specialist knowledge in a given specialty (Puertas et al 2013). The holistic care of patients need not or should not suffer from such increase in specialist knowledge. The training of medical doctors has to be integrated in such a manner that it provides adequate care in addition to specialist care.

### The tug of war between generalists and specialists

Few decades earlier, when there were very few specialty courses, MBBS degree was sufficient for the doctors to treat many diseases and the public too did not always look for specialists due to lack of them in their locality or simply was not necessary unless required to diagnose or treat complex diseases. Thanks to increase and broadening of the various medical specialties, today we have a vast number of specialty and super-specialty courses (Subba et al 2012; Querido et al 2015). Hence the medical graduate of today seeks to expand his expertise in any of the above specialties depending on his/her interest. In that context, the medical graduate whom the government spends enormously to produce is not able to serve the community and so some precious years are lost in the name of preparation for postgraduate entrance examinations (Sood & Adkoli 2007). In addition, given the necessity of becoming a specialist of one's own choice puts the candidate under pressure as he has to simultaneously find time to prepare for the entrance examinations. The question however remains whether specialization is a must to practice medicine. There is also a debate which exists between generalists who are viewed as providing holistic care and treating the person as a whole vis-à-vis specialists who are concerned only with the organ or system they are specialized in, forgetting the individual as a being.

### Conclusion

There is a need to make the long duration of medical course more tailored towards producing employable doctors who can serve the community and at the same time keep the doctors satisfied. It is important for a community to see to that the services of doctors are not lost because of lack of skills or infrastructure (Emmanuel & Fuchs 2012). Much of the time is spent and efforts are put to enhance the quality of medical education especially undergraduate medical degree leaving little time and energy left to organize postgraduate medical education. It is important to ponder the way in which medical education is delivered in this era where specializations in medicine are deemed as essential for effective practice of medicine (Irby et al 2010; Nancarrow et al 2014). It is important to align our education system with the changes in the environment and advances in the field so that appropriate training and skills are imparted at various levels. Finally, the question that needs to be addressed is whether we need to see MBBS degree as an end or the beginning of medical career.

**Conflict of interests:** None to declare.

### References

1. Ananthakrishnan N., (2011). Distribution of postgraduate medical seats in different disciplines: is there rationality in decision-making? *Natl Med J India* 24:365-367.
2. Emanuel, EJ., Fuchs, VR., (2012). Shortening medical training by 30%. *JAMA* 307:1143-1144.
3. Irby, DM., Cooke, M., O'Brien, BC., (2010). Calls for reform of medical

education by the Carnegie Foundation for the Advancement of Teaching: 1910 and 2010. *Acad Med* 85:2207

4. Jayakrishnan, T., Honhar M., Jolly GP., Abraham J., Jayakrishnan T., (2012). Medical education in India: Time to make some changes. *Natl. Med. J. India* 25:164-67.
5. Manickam, L., Sathyarayanan Rao, TS., Undergraduate medical education: Psychological perspectives from India. *Indian J Psychiatry* 2007;49:175-8
6. MCI Vision 2015. [www.mciindia.org/tools/announcement/MCI\\_booklet.pdf](http://www.mciindia.org/tools/announcement/MCI_booklet.pdf) Accessed on 22nd July 2016.
7. Nancarrow, SA., Moran, AM., Graham, L., (2014). Preparing a 21<sup>st</sup> century workforce: is it time to consider clinically based, competency-based training of health practitioners? *Aust Health Rev* 38:115-117.
8. Puertas, EB., Arósuipa, C., and Gutiérrez, D. (2013). Factors that influence a career choice in primary care among medical students from high-, middle-, and low-income countries: a systematic review. *Pan Am. J. Public Health* 34, 351-358.
9. Sood, R., Adkoli, BV., (2000). Medical Education in India – Problems and Prospects. *J Indian Academy of Clinical Medicine* 1(3):210-12.
10. Subba, S.H., Binu, V.S., Kotian, M.S., Joseph, N., Mahamood, A.B., Dixit, N., George, A., Kumar, P., Acharya, S., and Reddy, P. (2012). Future specialization interests among medical students in southern India. *Natl. Med. J. India* 25, 226-229.
11. Supe, A., Burdick, WP., (2006). Challenges and issues in medical education in India. *Acad Med.* 81(12):1076-80.
12. Shah, SU., (2009). The medical students' dilemma: which postgraduate specialty to pursue? *J. Postgrad. Med.* 55, 294-295.
13. Sreekar, H., Nithya, R., Nikhitha, R., and Sreeharsha, H., (2014). Career intentions of medical students trained in India. *Educ. Health Abingdon Engl.* 27, 64-65.
14. Querido, SJ., Vergouw, D., Wigersma, L., Batenburg, RS., DeRond, ME., Ten Cate, OT., (2015). Dynamics of career choice among students in undergraduate medical courses. A BEME systematic review: BEME Guide No. 33. *Med Teach* 15:1-12.