

Systems of Medical Education in India & USA :

A review

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ABSTRACT

Medical education has lots of alteration, glory, dignity and economical interest in India. So many students want to become doctor. Indian medical education system is reviewed with facts and figures. USA medical education system is also reviewed.

Medical interviewing and physical examination skills are core pillars of clinical medicine. The clinical medical training provided to medical students and with admission and assessment procedure used by medical colleges and institutions to ensure that students have acquired the clinical skill necessary for graduate medical education. One big advantage for Indian medical education system over USA medical education system is type of diseases and number of patients, to be examined by medical student.

Comparison of both the systems have been communicated. Advantages over Indian medical system is concluded. Suggestions are also reported for both the systems.

KEYWORDS:- *Medical interviewing, clinical medicine, clinical medical training, facts & figures medical students. Medical education system.*

INTRODUCTION

The first medical college was set up in 1835 in Kolkata. Today India has 482 medical colleges.¹ The medical education system in India presently allows anyone who can memorize and store a large amount of information to be a doctor.

More than 15.9 lacs students² appear for medical entrance test. Out of these 795031 student² could clear the test in year 2019 though the method of selection of doctors-to- be is highly defective, even though our institutions have produced many world class physicians. That is because of huge number of medical student.

The teacher's are selected solely based on their degrees and reservation system. Additionally no training is given to the staff in teaching methodology

"The market has been flooded with doctors so poorly trained, they are little better than quacks"- sujatha Rao. India's health secretary.

Health and healthcare need to distinguished from each other. In India medical students are dealings with both health & healthcare. Function of medical faculty & students are guided by government policy which may or may not be implemented properly.

It is general predictions, about health of populations is no furiously uncertain. Indian political economy- on progress made in poverty mitigation. That is lead to good public health environment.

Only government medical institutes & some part semi government institutes are consciously implementing government's policies for public health.

On other hand in USA private sector (even no medical) and local governing bodies are working hard for public health.

MEDICAL COLLEGE COMPARISION

No.	INDIA	USA
1	Run by the Businessmen without any medical expenses.	Run by the co-operate houses with long medical experience.
2.	Many medical colleges charges “Capitation” fees OR compulsory donation.	No such charges but entire medical admission process is costly.
3.	The most productive medical college is also its largest public health institute.	Though there is a good coordination between medical colleges and health institute they run separately.
4.	In all initial training are more theoretical than practical	In all initial training are more practical than theoretical.
5.	In almost all cases Indian doctors/ trainees are better at history taking, knowing pathos physiologic basis of disease and making accurate diagnosis with just physical examination.	American doctors/trainees were lost and in capacited without support of investigation.
6.	By avoiding unnecessary & may necessary investigations healthcare cost is law.	Investigation base diagnosis leads to incidental findings, and huge toll on health care cost.
7.	In India text book is consider as a Bible, memorized world to world and regurgitated	Investigation baize diagnosis lead to incidental findings and huge toll on health care cost. Text book is only a reference and is subject to change and new discoveries.
8.	Lack of liberal atmosphere kills the creativity and hinders the India progress.	Promotion to creativity leads to discoveries and innovations.
9.	Other than the text book Indian medical colleges, don't promotes literature and practice evidence based medicine.	By readings literature and articles than textbooks, they keep up to date and also sharpens the ability.

DISCUSSION

MEDICINE EDUCATION IN INDIA:

As a result of British Government in India, our present five and half year course structure closely resembles that in Britain and other common wealth countries. Pre-medical course work include physics, chemistry and biology as long as the aforementioned prerequisite courses are completed. They must appear in National Eligibility cum Entrance Test (NEET). It is All India level common entrance examination conducted by the central Board of secondary Education (CBSE) for admission to MBBS and BDS courses at under graduate level. The admission to the fifteen All India Institute of medical sciences is taken through the ALLMS MBBS 2019 entrance examination.

Deemed University & Private institution gained status of university through receiving recognition from the University grand commission by the recommendation of Medical council of India. Private medical institute and deemed university may have management Quota seat & NRI seats.

Independent investigation and reports now some medical colleges were able to bypass merit.⁵ Things have become much better with NEET. Supreme court had made NEET mandatory for even private colleges and deemed universities Media reports indicate that black money generation in medical education would be more than 10,000=00 crores.⁶

This huge money has impacted baldy on medical education because that “kills merit”.

Similar, situation for the post graduate seats and super specialization seats is there. Even after all the loops, India has produced good quality doctors.

Medicine education in USA:

The educational steps to become a physician in the USA are slightly different than in Europe and very different than in India.

After graduation from “high school” at age 18, students attend a college or university and obtain a 4 year bachelor’s degree before being eligible to begin medical school.

One weakness in USA healthcare system is the misdistribution of specialities. Despite the known societal benefits of primary care physicians⁷ there is a current and future shortage of primary care physicians in USA⁸

On a simple note studying medicine in USA is not every one’s cup of tea. To get admission in medicine, one must pass USMLE.

United States Medical Licensing Examination

Before applying to any medical school, international students should make sure they have completed a four year bachelor’s degree. US student must pass that degree at the time of admission. Student will also need to have completed the MCAT test.

As a international student, you will unfortunately be at a disadvantage to local students. Many publicly funded colleges are required to put part or all of their state funds of the schools state. It can put international students at huge disadvantage in selection process leads expensive private university admission.

The USMLE is a three step examination sponsored by the federation of state medical boards and National Board at medical examiners required for physician licensure for all physicians. Regardless training location, to practice in the USA.

Step-1

Recognized institutes of medicine students. Receiving training, take step-1 of USMLE at the end of second year at medical school.

USMLE Step-1 assesses whether students understand and are able to apply important concepts of basic science to medical practice, with special emphasis of principals underlying modes of therapy, health and disease.

The step-1 of USMLE will be covers approximately 18 medical disciplines and its inter-disciplines. Its 8-hours exam conducted in single day. The questions are primarily multiple-choice questions.

Step-1 contains seven 60-minutes blocks. On computer base test, each block has highest number of Question 40 or less. Total number of Questions in 8 hours exam should be 310 or less.

Step-2 examination has two components.

(A) Clinical skills (B) clinical knowledge

(A) Clinical skills (CS)

Step-2 clinical skills assesses the ability medical school students to apply medical knowledge, skills and understanding of clinical science to real patient care under supervision.

You have 15 minutes for each patient encounter with the help of physical examination you will be able to gather enough information to develop a preliminary differential diagnosis and diagnosis work-up plan as well as begin to develop an effective physician patient relationship you should treat each patient you see as you would a real patients.

Step-2 clinical knowledge is nine hours long multiple-choice portion of second part. It assesses clinical knowledge, skills and understanding of clinical science. It is broadly based integrated examination contains following subjects.

- Integrated clinical encounter (ICE)
- Communication and interpersonal skills(CIS)
- Spoken English proficiency (SEP)

(B) clinical knowledge

usmle step-2 clinical knowledge assesses whether medical student can apply medical knowledge. It includes emphasis on health promotion and disease prevention.

It is one day examination It is divided into eight 60 minutes blocks. Test item formats may vary with in each blocks.

It is constructed according to integrated content outline that organizes clinical science material along two dimensions (1) physician task and (2) disease category.

It includes all branches are taught in US medical School.

Step-1 and step-2 score is most important when it consider for M.D./M.Sc. admission.

Usmle Step-3

This examination of medical school graduates or student for unsupervised practice of medicine. Student typically take this exam at end of the first year at residency. It includes all residency sub subject compulsory. It is today's examination. The first day of testing includes 233MCQ divided into 6 blocks of 38-40 items. 60 minutes are allotted to each block. This is approximately 7 hours test session on second day 9 hours session for 180 MCQ divided into 6 blocks of 30 items and 45 minutes for each blocks. This is followed by 13 case simulations of 20 minutes of real time.

The USMLE was not originally intended to be used in selection decisions but as it is a rigorous standardized exam that is taken by almost every applicant who participates in Match, many residency program directors have found it to be useful measure for comparing candidates from various medical institutes.

For many students, that first year is preliminary residency and they then continue on into an advanced residency in deferent specialty.

CONCLUSION:-

1. Although competency-based medical education has altered renewed interest in recent years among educators but nit among policy makers 10% of medical colleges currently applied for accreditation process used by National Accreditation and Assessment council.
2. Fund to our medical colleges and associated hospital must govern sticky. Funding to student must be follow quality, not cast, region and religion. Small research activity could be funded to inspire student. At under graduate level.
3. How do we integrate traditional complementary medical knowledge into modern medicine course? It should be a part of pre-medical examination and first year of M.B.B.S.
4. On other hand, US medical school, by reviewing survey databases and site visit reports by the Liaison Committee on medical Education (LCME). Substantive change was defined as the curriculum, integrating basic and clinical science increasing students exposure to ambulatory and primary care, promoting performance – based teaching and the assessment of clinical skills³

5. All U.S. medical students participate in preclinical courses. Clinical reasoning such preclinical courses. This allow students to know themselves and their interest in medicine as well as its branches, at ground level.

SUGGESTION For Indian Medical education system.

- 1) The course is lengthy too much emphasis on non clinical subject and topics. It should be in students reach.
- 2) Yearly examination system must be replace by continuous evaluation.
- 3) 200 to 250 students in a class is the biggest problem. Depressed students are need of effective mentorship.
- 4) Improvements in patient care are rapidly and constantly updated that almost every text book is outdated. So students must train to seed and find that latest information.
- 5) There is no pre-medical training so student could not know medical field on real ground. It should be done.
- 6) Knowledge and practice of medical Ethics should be a part of syllabus.
- 7) Almost all resident doctors are over burden with their clinical work. So no time for Academic skill improve there must be some time for academic skill improvement.
- 8) Doctors who work in teaching hospitals are instructors. Of course many at them are excellent teachers and they should be a part of management.
- 9) Controlling of privatization must be done by Government.

SUGGESTION For USA Medical education system.

1. Digital health tools are to reach their full potential. Doctors must train.
2. Today medical practice is team work. Doctors should train to be a leader. So they are integral part of management.
3. Promote work that advances medicine.
4. An educational model of medicine should not be heavily utilitarian.

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