

## Voice of Expert

### Current Status of Postgraduate Medical Education in India : Some Thoughts

**Pawanindra Lal\***

#### Q.1 In India after doing Graduation in Medicine what are the options for PG ?

**Ans :** After graduation in medicine, aspiring doctors can appear in the NEET PG examination for roughly 45000 postgraduate seats in medical colleges. National Board of Examinations in Medical Sciences (NBEMS) has added nearly 2000 seats in 8 new subjects especially focussed towards district hospitals and this will not only improve services in the peripheral hospitals where more than 50% of the population is served, but also provide training opportunities in high volume hospitals under trained specialists. These new diploma holders can have career progression to a full DNB degree through the two year secondary DNB programme admission for which is conducted by a Post Diploma Common Entrance Test (PDCET) by the NBEMS. Additional opportunities are there for a direct 6 year DrNB (Doctorate) course in CTVS, Neurosurgery, Pediatric ASurgery and Plastic Surgery through the same NEET PG examination. Students also have the option for joining Central or State Government Health Services through the Union or state public service commission examinations to join as medical officers. Here again, NBEMS has an opportunity for 50% seats reservation for state doctors in Diploma courses and also in Degree courses. There is also provision for sponsored seats wherein candidates can be considered for such state sponsored candidates based upon their merit in NEET PG examination for PG training anywhere in the country in NBEMS accredited institutions where such seats are available.

#### Q.2. How a Medical Graduate can enroll for PG course?

**Ans :** All PG courses are through the National Eligibility cum Entrance Test (NEET PG) conducted by the NBEMS. For AIIMS and certain other institutions of importance (AIIMS New Delhi, Bhopal, Bhubaneswar, Jodhpur, Nagpur, Patna, Raipur,

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Rishikesh, Bibinagar, Bathinda, JIPMER Puducherry, NIMHANS Bengaluru, PGIMER Chandigarh & SCTIMST, Trivandrum), a separate INI CET is conducted twice a year.



**Dr. Pawanindra Lal**

#### Q.3. Do you think the present method of selection by MCQ elimination test is perfect?

**Ans :** The present method of selection by MCQ is the most suitable method considering that nearly 1,75,000 MBBS students appear for the 45000 PG seats providing a uniform, fair and objective method of assessment where the final year MBBS scores of all candidates are different due to the hundreds of universities conducting these exit level examinations. What is required is to improve the quality of these MCQs by making them clinically oriented based on the actual bed side management rather than from rote based knowledge from text acquired only by memorising facts. The United States Medical Licensing Examination (USMLE) is an example of how intensive such MCQs can be which requires great deal of effort on the part of the faculty to make such high quality differentiating items with capacity to judge all levels of students.

#### Q.4. Recently, NBE has extended services of DNB, DrNB trainees as Resident Doctors for three months.

##### What's your reaction in this regard?

**Ans :** The extension of training by NBEMS was done as a conscious decision by the Board to compensate for the loss in clinical training due to COVID-19 lockdown and to make up for hands-on training in the concerned speciality of the students. any decision which improves the training and therefore aims in improving patient care can only be welcomed.

### Q.5. Is there any requirement for an aptitude test for Medical Education?

**Ans :** Yes, the aptitude test is an important component of medical education and actually needs to be evaluated when the students are being admitted into the medical college after their schooling. Many international admission programmes assess the aptitude of students rather than evaluating their skills in science subjects like Physics, Chemistry and Biology which are allowed only if a certain level of proficiency has been achieved in these subjects. A great example is the United Kingdom Common Admission Test (UKCAT) where a great deal of emphasis is given on verbal reasoning, decision making, quantitative reasoning and abstract reasoning. Further these are timed strictly to enable the sharpest minds to crack the examination. These tests were designed to reduce the attrition rate i.e. decrease the number of medical students who leave medicine as a career at the end of their training since a lot of time, effort and money is spent on making one doctor. Unfortunately, in India we don't have such tests and therefore attrition rates are higher.

**THE HAPLESS MEDICAL STUDENTS ARE ALREADY OVERBURDENED WITH EXAMS. ADDING SOME MORE EXAMS TO THE LIST WOULD ONLY LEAD TO MORE FATIGUE AND ATTRITION.**

### Q.6. After someone is admitted in any PG Course, is there any monitoring system to observe the progress of the candidate?

**Ans :** Under the NBEMS, there is a internal assessment carried out in the form of a Formative Assessment which is carried out for Post MBBS 3 year DNB Course and DrNB Super Speciality Course candidates in the 2nd year, for Direct 6 years Super Speciality courses in the 2nd and 4th year and for Fellowship Courses in the 1st year. Unfortunately, university programmes under the National Medical Commission (erstwhile Medical Council of India) does not have a formal formative assessment like NBEMS. Such internal evaluations allow the candidates to be examined in the mid term to ensure their competence in knowledge and skills and also their clinical acumen is evaluated at their own workplace by external assessors/examiners giving them scope to improve if they are found to be below par.

### Q.7. In your opinion, what can be changed to ensure proper training?

**Ans :** A Good training programme has nothing to do with internal assessments or tests. It needs committed teaching faculty who are ready to spare time for bed side and on the job teaching and a hospital where there is plenty of clinical material in the concerned specialty so that enough hands-on work is available. We call these as case mix (case variety) and caseload (total number of cases) available. This is like a good hotel with good chefs and a good kitchen making tasty food. Now you want people who can relish this food. So trainees must be also equally committed to make the best use of the facilities and make the most of the opportunity available for their postgraduate training. Currently, hands-on branches like those having procedure skills have a lot of opportunity to improve training using Simulation models, mannikins, and virtual reality simulators and these can augment the skills even more. There is a need to set up National and Regional level Skills and Simulation Centres and the NBEMS has already planned for a National level centre to be created in the not so distant future. However, smaller institutional level simulations must also be encouraged for periodic training in the same hospital or the same city.

**WITHOUT PROPER SALARY STRUCTURE AND OTHER INCENTIVES, IT IS VERY DIFFICULT TO GET COMMITTED TEACHING FACULTY FOR MEDICAL COURSES. ALSO, THE SALARY SCALES IN DIFFERENT PARTS OF INDIA VARY WIDELY. NATURALLY, IT WOULD BE DIFFICULT TO GET A UNIFORM LEVEL OF DEDICATION OF MEDICAL TEACHERS IN DIFFERENT PARTS OF THE COUNTRY.**

### Q8. What is the present Exit/ Final Assessment of PG Course?

**Ans :** For the NBEMS, there is a theory examination conducted on the hybrid mode, ie, a pen and paper examination where the question paper is displayed on the computer or tablet screens. Those who clear the theory are eligible to appear in the DNB Practical examination which is the case based examination. During Covid times, NBEMS introduced OSCE based assessment to supplement the lack of clinical cases due to nationwide lockdowns and lack of patients in concerned specialties. The OSCE component has been progressively reduced from 66% in 2020 to 50% in early part of 2021 and has been further reduced to

33% in the current diet of examinations due to the increasing number of normal cases. Since OSCE evaluation was found to be more discriminatory where such discrimination was not coming from conventional practical examination, it has been retained for the moment and more data will be analysed to decide if this 33% should continue even in non-covid times or be removed completely.

**OSCE IS A GOOD WAY TO EVALUATE STUDENTS. IT SHOULD BE AN ESSENTIAL PART OF FUTURE EXAMINATIONS ALSO.**

#### **Q.9. Does the Exam system require any modification?**

**Ans :** Examination system is always a standardised process after it has gone through a lot of rigours of evaluation. However, experience has shown that for clinical branches where patients are to be directly treated, case based examination has stood the test of time. NBEMS has a variety of examination components other than cases like ward round component which evaluates critical decision making in bedside patient management and OSCE has been the latest innovation to evaluate students uniformly on a clinical situation without any bias or prejudice and be marked on standard answer keys. The objectivity component of the examination process has thus been strengthened removing subjectivity. More skills based evaluation especially for surgical branches may be introduced and similarly where instruments and machines are used, their usage may be evaluated though these are difficult to execute nationally on a pan India basis. I am sure such reforms will come in slowly and improve the ultimate evaluation of the trainee at the end of his/her training.

#### **Q.10. What's basic difference in PG education in India and other countries like US, UK?**

**Ans :** There are two basic differences between postgraduate education in India and in countries like the US or UK. Firstly is the method of selection. In the US it is through USMLE scores which are uniform throughout the country and then references from departments where the candidate has worked. In the UK, it is through the MRCS/MRCP pathway and then references from units where one has worked. In India, it is through NEET PG examination which is uniform for all NMC/NBEMS institutions. The second main difference is in the duration of postgraduate training. Whereas, in India it is three years, in the US it varies

from 3 to 5 years. Additionally there are sub-specialty fellowships mostly for one year duration. In the UK, similar training is for 5-8 years. The longer duration of postgraduate training is designed to offer optimum clinical hands-on experience to the trainees.

#### **Q.11. There is varied infrastructure and resource availability from Institutions, so how can this be standardized?**

**Ans :** The purpose of good accreditation criteria is exactly to minimise this disparity between institutions in terms of infrastructure, resources and manpower. If the criteria are correctly applied in letter and spirit and the minimum requirements are fulfilled by institutions, disparities will be brought to negligible level. NBEMS has always strived towards ensuring that minimum requirements as mandated for a particular course in terms of infrastructure and manpower are always fulfilled.

**WE THINK THAT SOME OF THE ACCREDITATION CRITERIA ARE A BIT UNFAIR. SOME RESOURCES, WHICH ARE EASILY OBTAINED IN INDUSTRIALIZED PARTS OF INDIA, LIKE THE WEST AND NORTH, ARE DIFFICULT TO PROCURE IN THE LESS INDUSTRIALIZED PARTS LIKE THE EAST AND NORTH-EAST. THUS, APPLYING ONE UNIFORM CRITERION TO THE WHOLE COUNTRY WILL BE DISCRIMINATORY TO THE LESS DEVELOPED PARTS OF THE COUNTRY. FOR EXAMPLE, IT IS VERY EASY TO DEMAND ECHOCARDIOGRAPHY AND ENDOSCOPY MACHINES IN JAIPUR OR AHMEDABAD. BUT THOSE MACHINES WILL BE A PRIZE IN ALIPURDUAR MEDICAL COLLEGE.**

#### **Q.12. Is there any role of Mentor in PG Training? If yes How can this be implemented?**

**Ans :** Indeed mentorship is the best way to learn and hone the skills as required by postgraduates. Though the students are expected to learn from the whole team they are working with, a senior faculty who is usually a guide or a supervisor acts like a mentor to the trainees in not only helping them learn the nuances of the subject matter but also life skills including communication, keeping balance and ensuring that mental peace and harmony are never disrupted in challenging and stressful times. Mentorship model is also like the "Guru-Shishya" tradition well known in Indian culture. It is therefore

important for mentors - the teachers to be conscious of their actions themselves as they serve as role models for the future generation.

### Q.13. How many faculties are yet to have DNB affiliations?

**Ans :** Currently NBEMS has more than 84 postgraduate, post doctoral and fellowship programmes and many more are in the process of being launched. In the year 2020-21, a postgraduate course in Palliative Medicine has been started and first year candidates should be joining this course from NEET PG 2021 conducted in September 2021. Eight new diploma courses have been started under the guidance and directions of Ministry of Health and Family Welfare, Government of India, in the subjects of Anaesthesia (DA-NBEMS), Obstetrics and Gynaecology (DGO-NBEMS), Pediatrics (DCh-NBEMS), Family Medicine (DFam.Med-NBEMS), Ophthalmology (DOPtha-NBEMS), ENT (DLO-NBEMS), Tuberculosis and Chest Diseases (DTCD-NBEMS) and Medical Radiodiagnosis (DMRD-NBEMS) and nearly 2000 seats are for the taking again through the recently conducted NEET PG 2021. It is interesting to note that NMC(erswhile MCI) closed all the diplomas and upgraded them in medical colleges to Degree courses mainly because Diploma holders cannot be considered as teachers in medical colleges and there is need in the country to have more teachers for increasing numbers of medical colleges. Hence, the diploma space was lying unutilised and the government entrusted this responsibility to the NBEMS in 2020 which was accepted and taken to a very successful launch in the very first year.

### Q.14. Do you think DNB has opened up job opportunities for young doctors?

**Ans :** Indeed, through the DNB courses in broad specialties and DrNB courses in super specialties, NBEMS has contributed in adding nearly 10,000 annual

postgraduate and postdoctoral seats. The Government of India has already recognised and made DNB equivalent to MD/MS and DrNB equivalent to DM/MCh courses. Hence, all the students passing out are treated at par with university qualified doctors and are eligible for all jobs as senior residents or teachers in medical colleges subject to fulfilment of the requirement of equivalence as per the bed strength of the DNB/DrNB hospital in the NMC Act. For those from smaller hospitals, one year of extra senior residency is required to be done from a medical college for equivalence for teaching job only and not for practising in the country. Sponsored seats for MBBS doctors in-service and reservation for in-service doctors have been extra steps to encourage such interested and NEET PG/ NEET SS qualified doctors for career progression pathways. Diploma holders also have the unique opportunity to upgrade to full Degree through the Post Diploma Common Entrance Test (PDCET) conducted by NBEMS for admission to secondary DNB programme of two years duration.

Overall, NBEMS has contributed towards utilising non medical college institutions both in government and private sector to train medical manpower in specialty subjects from experts in the field and simultaneously improve the patient care by introducing residency scheme in such institutions.

**JOB OPPORTUNITIES FOR YOUNG DOCTORS ARE NOT INCREASING SUFFICIENTLY.**

**WHILE CASUAL JOBS LIKE RMO-SHIP IN NURSING HOMES ARE THERE, PROPER BLUE COLLAR JOBS FOR DOCTORS WHERE THEY CAN GET A RESPECTABLE SALARY AND STANDARD LIFESTYLE ARE VERY FEW AND FAR BETWEEN. THUS, THE HERCULIAN EFFORTS DOCTORS UNDERTAKE TO COMPLETE A PG COURSE WITH BOND SERVICE IS NOT ALWAYS AMPLY REWARDED IN LATER LIFE IN INDIA.**

**Dr. Pawanindra Lal, thank you for the valuable insight into 'Postgraduate Medical Education in India'.**