

Curriculum of Anaesthesiology at the Undergraduate Level: How Effective is the Current Scenario?



Anaesthesiology is a unique specialty in medical practice of recent origin since the demonstration of successful ether anesthesia by William Thomas Green Morton on 16th October 1846. The discovery of action of curare at the myoneural junction by Claude Bernard in 1857 has revolutionized the technique of general anesthesia by the use of neuromuscular blocking drugs. Use of cocaine as local anaesthetic by Carl Koller in 1884 and the introduction of clinical spinal anesthesia by August Bier by the same drug in 1898 has taken the speciality to a different angle. Though the speciality has evolved to provide pain relief during surgical procedures, the clinical skill acquired by the anesthesiologist has now encroached outside

the operation theatres like the postoperative care rooms, the intensive care units, cardiopulmonary resuscitation areas and the pain clinics.

The undergraduate medical curriculum is aimed at providing primary medical care to the patient with basic knowledge of all specialties needed for this. It also creates interest of the candidate in various specialties, which later prompt them to choose their specialty for later postgraduate studies too.

There is no consensus regarding the optimal curriculum or duration or content required for the undergraduate medical education and hence it varies from place to place. To achieve the goal of patient care like perioperative management, critical care, pain therapy and cardiopulmonary resuscitation skills, adequate training in anaesthesiology should start from the undergraduate level itself.

Unfortunately, these knowledge to be learnt from the anaesthesiologist has not gained its due credit and importance during the undergraduate

medical education period. This deprives the patient adequate medical treatment and does not generate the necessary aptitude and interest of these undergraduates in choosing anaesthesiology as their future subject of studies also. This probably is the main reason for the lack of qualified anesthesiologists in a developing country like India.

Anesthesiology is considered as a stressful specialty. The reason may be due to dealing with the patient's life and death during the entire perioperative period, with limited recognition of their stressful job. This probably adds to the scarcity of qualified persons in anaesthesiology practicing this specialty.

Currently, in our country, anaesthesia education at the undergraduate level is often neglected, when compared to other basic specialties like medicine, surgery, obstetrics & gynecology and pediatrics. The reason may be the thinking that anesthesia does not come into the routine stream of basic patient care. In fact,

anesthesia education involves not only the perioperative medical care, but a wide spectrum of medical care including cardiopulmonary resuscitation, critical care, pain therapy, trauma and airway management. This thinking should bring the position of anaesthesiology to the mainstream specialty subject of undergraduate medical education.

At present, during the undergraduate training period, there are two weeks of clinical posting and around twenty hours of lecture classes in the subject. During the internship period, they get two weeks of practical training. This seems to be inadequate to teach such a spectrum of areas involved in this subject. Further, since there is no separate theory or clinical examination in the subject, there is a natural tendency for students as well as the teachers to take the subject in a very light manner.

What is the solution to this problem? More stress has to be paid for the inclusion of anaesthesiology as a major subject in the undergraduate medical education. There should be at least one month of clinical postings in the specialty to train them various aspects of resuscitation, airway management and other skills. There should be at least two hours of lecture classes in a week during one of the semesters. After this, there should be a separate examination both in theory and practical, exclusively for anaesthesiology. The internship residency programme should incorporate minimum of one month of posting in anaesthesiology to gain the practical skills. The medical curriculum should be modified to attain this goal. Above all, it is the duty of the faculty of the specialty to take keen interest to create the aptitude and skill to their students in the subject.

In fact, the Delhi University has proposed anaesthesia examination as a separate subject in the ninth semester, subject to the approval of the Medical

Council of India and the faculty of Medical sciences of the university. This would probably be positive step in this direction, which can be a model for the other Indian Universities too.

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References

1. Rohan D, Ahern S Walsh K. Defining an anesthesia curriculum for medical undergraduates. A Delphi study. *Med Teach*. 2009; 31(1): e1-5.
2. Alam MR, Islam MZ. Evaluation of teaching curriculum of anaesthesiology by the undergraduate medical students. *JAFMC, Bangladesh*. 2011; 7(1).
3. Asha Tyagi, Surendrakumar, Ashok Kumar Sethi, Upreet Dhaliwal,.Factors influencing career choice in anaesthesiology. *Indian J Anaesth*. 2012; 56(4): 342-347.
4. A Tyagi, S Ahuja, A Battacharya. Undergraduate medical students assessment of teaching curriculum – A cross sectional study. *Indian J Anaesth*. 2002; 46(3): 186-188.
5. LD Mishra. Editorial. *Indian J Anaesth*. 2002; 46(5): 344-346.
6. MBBS Anesthesia curriculum, Delhi University.