



Training and education of laboratory medicine in India

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Laboratory medicine is a new branch in India as in most of the places, laboratory services are offered by departments of Biochemistry, Pathology and Microbiology. Training and Education of professionals in these subjects is regulated by the Medical Council of India by means of MD (Pathology, Biochemistry, Microbiology) program of three years duration, following graduation from medical school and completion of the required internship. Apart from this, candidates with Master of Science (M.Sc) in Biochemistry/Microbiology (2 years) or Medical Biochemistry/Medical Microbiology (3 years) can also be appointed as Clinical Biochemists/Microbiologists after completion of PhD. Post-doctoral programs for further specialization are also available from various sources and are generally of 2-3 years duration. These programs have a basic requirement of MD/PhD degree followed by few years of research experience. Indian Council of Medical Research (ICMR), a Government body offers post-doctoral fellowships where qualified clinicians/researchers can train themselves in other countries in specialised areas of Laboratory medicine. Medical laboratory technology education is imparted by courses at various levels – Diploma, Bachelor's as well as Master's level. Candidates with such degrees get appointed in different medical laboratories as per requirement. Moreover, training programs are offered by several government and non-government organisations to train clinicians, technicians in specialised areas. Accreditation of medical laboratories, offered by National Accreditation Board for Testing and Calibration Laboratories (NABL), is on rise in India and well-trained assessors are required for assessment of medical laboratories applying for accreditation. Certain programs based on ISO-15189 are offered by appropriate and approved bodies to train qualified laboratory professionals to become internal quality managers and assessors. Internal quality managers can be appointed as Quality managers to maintain quality aspects of the laboratory. Assessors are appointed by NABL for assessment of new medical laboratories. Association of Clinical Biochemists of India (ACBI) has started a new professional course in Clinical Biochemistry named Membership of Indian Board of Clinical Biochemistry (MIBCB). The course has been developed to address the non-uniformity and shortage of seats of other courses in the country. All India Institute of Medical Sciences (AIIMS), New Delhi conducts a three year MD program in Laboratory Medicine. Presently, it is the only program that trains professionals in specialty of laboratory medicine.