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Perspective

Rheumatology in undergraduate curriculum

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ARTICLE INFO

Article history:
Received 6 March 2014
Accepted 2 April 2014
Available online 10 May 2014

Keywords:
Rheumatology
Undergraduate
Education
Training

ABSTRACT

Undergraduate rheumatology training is a developing concept that has not taken roots in a majority of medical colleges in India. The need for such training is unequivocal but implementation is thwarted by certain basic problems that can be solved.

1. Introduction

Medical education in India is in a state of transition making an effort to qualitatively satisfy the changing needs of the time. An aware society demands quality healthcare and the students undergoing medical training need to improve their knowledge, skill and attitude to fulfill these expectations. In an environment where specialty and subspecialty is in great demand how can an undergraduate curriculum prepare graduate students to move seamlessly into a higher echelon of knowledge to be at par with global standards? An undergraduate (UG) must be trained to function effectively as a first contact physician and an innovative curriculum can go far in preparing a quality Indian Medical Graduate with his/her long term needs in mind. Where does rheumatology training fit into the scheme of things? Before we address this issue, an understanding of the health needs of the country and the preparation of the UG to be able to implement these requirements is imperative.

It is an accepted fact that the MBBS doctor is the kingpin of India's medical services that caters to a huge swathe of population across the country. Therefore, development of the UG medical education has been a major concern for the planners.[1] There is an increasing need for primary care physicians as well as specialists in the country. The system is making an effort to bridge the demand supply gap by increasing the number of medical colleges, both in the government and private sector, and increasing UG/PG seats to fill the shortages. But the constraints for rapid, unchecked expansion, without compromising on quality, are resources both financial and personnel. Government of India recognizes Health for All as a national goal and expects medical training to produce competent 'Physicians of first contact' towards meeting that goal.[2] Therefore, UG education and training should prepare students not only for primary tasks but adequately prepare them for the next career stage.[3]

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http://dx.doi.org/10.1016/j.injr.2014.04.001

2. Teaching programme

Teaching programme has three basic components: a) Curriculum, b) Teaching method and c) Assessment. Curriculum should clearly define knowledge to be acquired, skills learned and attitude developed. All three components should interrelate, and modified in the light of regular audit and in response to changes in medical knowledge and practice.[4] Developing an education programme is a dynamic process. This task has been entrusted to the MCI that prepares recommendations and expects the medical colleges to implement. The broad outline of knowledge to be gained in medicine, as outlined by the current MCI recommendations, highlights development of competence to diagnose common clinical disorders with special reference to infectious diseases, nutritional disorders, tropical and environmental diseases. Besides, an understanding of various modes of management including drug therapeutics, diagnostic and investigative procedure, and first level management of acute emergencies is also mandatory.[5] Interestingly, an overview of geriatric disorders and its management has also been highlighted, quite correctly, perhaps in the context of a growing population of elderly. Although musculoskeletal disorders are a major concern, considering its prevalence, for a first care physician, it has not found favor of a special tag. Grooming of a medical graduate needs a core curriculum that stresses on learning of clinical skills and knowledge of frequently encountered conditions.[4] It is necessary to avoid excessive expansion of knowledge component because factual overloading is a common criticism of medical college curriculum and to focus on practical training. In order to improve the quality of UG education, MCI came up with a vision statement 2015[6] that recommends major changes in the curriculum proposing early clinical exposure and integration of basic and clinical sciences with clinical medicine. It also proposes certain elective courses which span across major emerging fields that include genetics and immunology but overlooks rheumatology. If rheumatology is not a priority subject for UGs, how can they treat a huge load of musculoskeletal problems as a first care physician after graduation? Something is amiss in the understanding of the subject. It is reflected in the MCI vision document by its omission of rheumatology in the electives.

3. Misconceptions about rheumatology and necessity for UG rheumatology curriculum

Rheumatology is believed to be a part of orthopedics and practising rheumatologist are often believed to be orthopedic surgeons. Not many physicians in the faculty position are too happy to cede space to the growth of rheumatology as a subspecialty of medicine. There is also a growing concern and misunderstanding among many who are involved in the practice of rheumatology but have not been able to resolve the differences in understanding what constitutes rheumatology visa-vis clinical immunology, as practiced in this country. There are many overlapping conditions in both fields and it has added to the confusion. The dispute is yet to be resolved. In this scenario it is easy to understand why rheumatology has not found a space in UG curriculum.

There are many arguments to support why rheumatology needs to be an important component of the UG course[3,7]:

a) MSK pain and disability are common and presents a large community burden. The prevalence is close to 30% and perhaps more in the elderly. This is a worldwide phenomenon[8] and India is not far behind.[9] The impact of rheumatological disorders on healthcare cost, psychosocial status of patients and families are substantial.

b) Ability to assess the locomotor system is a common requirement for many practicing doctors.

c) Many facets of rheumatic conditions illustrate generic principles and require skills and attitudes that are pertinent to medicine and patient care in general.

d) Conditions that affect the locomotor system offer excellent common models for a variety of core curricular topic in medicine.

Despite high prevalence of rheumatic disorders and significant burden of patients and resources, education in rheumatology has been underdeveloped in most universities worldwide.[10]

4. UG rheumatology training in developed nations and in India

What is the situation of UG rheumatology training in developed nations? The EULAR standing committee on Education and Training, the equivalent for MCI, has published guidelines for implementation across universities in Europe.[4] Aim of the guidelines was to provide a document for rheumatology teachers that outlines priorities to be considered when developing an UG rheumatology course and to suggest minimal standards for an UG programme across Europe. It advocates minimum core competencies that relate directly to musculoskeletal MSK system.

The global recommendation for rheumatology UG curriculum had been outlined earlier.[11] It outlines several areas of knowledge and skill with regard to musculoskeletal disorders that need to be learnt by an UG namely:

a) To be proficient in basic skills to assess and diagnose MSK problems. b) Develop competency to assess specific common or urgent MSK problem. c) Learn theoretical background of the conditions and its management. d) Understanding of core knowledge necessary to support diagnosis and management including basic sciences.

These are global standards for minimum level of competence to manage patients with MSK disorders. They are intended to form the basis of a curriculum that can be adopted for any medical college in any country across the world. We can adopt them provided there is a commitment to improve standards in UG studies to produce graduates of global standard as envisaged by MCI.

In the U.S. musculoskeletal problems are a major cause of physical disability and pain. But it was observed that the graduate students and practicing physicians receive inadequate education in musculoskeletal medicine throughout their training starting from the medical schools. In the last decade a serious attempt has been made to rectify this