

Orthopedic Education – Where we stand

Gohiya A.

India having a huge population with majority of people residing in villages with poor access to health facilities is a major challenge to health for all mission. Increase in life expectancy leading to increase in the geriatric population thus increasing the load of degenerative and fragility fracture related patients is one challenge for orthopaedicians, other challenge is epidemic road traffic accidents increasing the burden to orthopaedic surgeons [1]. To provide adequate Orthopaedic health care to Indian population we need more orthopaedician which are well equipped to cater the needs of the society. Being a resource limited country the orthopedic training and orthopedic services have to contribute to each other to improve the bone health of the nation. Every country has different medical education system so as to fulfil the medical needs specific to their inhabitants [2].

India is having a poor doctor patient ratio which is even worse for orthopaedic care providers and most doctors are concentrated in the city areas, making the ratio very poor in villages where the majority of Indian population resides. Primary care physician or first contact physician in rural and sub urban areas is generally a MBBS graduate or an alternative medicine practitioner who is not adequately trained in identifying and providing primary care in common orthopaedic emergencies. In places where trained personnel are available the problem is of having optimal infrastructure to provide required care. The standard treatment guidelines for management of common orthopaedic ailments is not existing in India. The lack of proper referral system makes the scene worse making the health care system inefficient due to overload at tertiary care centres.

When it comes to care provided by the orthopaedic specialists for one condition the care provided is not uniform throughout different parts of the country. Orthopaedic training is not customised as per our need.

It was noted long back that there has been a considerable decline in standard of knowledge, particularly the basic sciences, namely anatomy, embryology, physiology, pathology, and genetic engineering which are alternatively going to play vital role in development of speciality [3]. The postgraduate training in India is not comprehensive enough and some graduates may have insufficient training to practice independently [4].

In India there is one death every 4 minutes due to road traffic accidents, for every death there are 30 severe and 50 minor injury patients [5]. Primary care physician encounters trauma more than any other condition. Making orthopaedics a major subject in MBBS training program and providing practical training during internship can improve the level of care. During post graduate courses inclination of students and teaching faculty is towards super speciality like spine arthroscopy, arthroplasty and at the end of course students are incompetent to independently take care of common traumatic, infective, neoplastic, degenerative and deficiency diseases [6]. The post graduate curriculum needs to be revised and focussed on the immediate needs of the society. The imparted training and assessment test should be uniform throughout the country to ensure standardised orthopaedic care to whole society.

Current literature is full of evidences for management of almost all clinical conditions which are prevalent in western world, in contrast the scarcity of literature for conditions endemic in India pose a decision-making problem. Proper training during postgraduate training to perform a quality research for the conditions which are endemic in our country can make a difference. Developing research instinct in all trainees is highly desirable [7]. All the improvements in the orthopaedic training are not possible without having a brigade of trained competent medical

teachers justifying the need for a structured and mandatory faculty development program [8].

We have lots of advantages, huge number of patients which we have, makes us capable of making guidelines for the orthopedic practices in the developing countries. This is possible by introducing mandatory research to the

institutions and encouragement, incentives to the researchers. We need to sensitize and convince policy makers to implement the desired actions to improve orthopaedic education and in turn the patient care for our society.

References

1. Jain AK. Orthopedic services and training at a crossroads in developing countries. *Indian J Orthop.* 2007;41:177–9.
2. Anil Kumar Jain. Current state of orthopedic education in India. *Indian J Orthop.* 2016 Jul-Aug; 50(4): 341–344.
3. Sankaran B. Education in orthopaedics: Is it going up or down. *Indian J Orthop.* 2003;37:1
4. Dougherty PJ, Sethi A, Jain AK. Orthopaedic surgery education in India. *Clin Orthop Relat Res.* 2014;472:410–4.
5. BMUS: The burden of musculoskeletal diseases. [Last accessed on 2016 June 29]. <http://www.boneandjointburden.org/>
6. Sarmento A. Sub-specialization in orthopaedics. Has it been all for the better? *J Bone Joint Surg Am.* 2003;85:369–73
7. Jain AK. Teaching-learning: An integral component of sound patient care. *Indian J Orthop.* 2008;42:239–40.
8. Tuli SM. The art and science of orthopaedics in developing countries. *J Bone Joint Surg Br.* 1985;67:840–2.