

Editorial

Role of Internal Medicine in 21st Century

Introduction:

Internal Medicine is the core medical discipline that is responsible for the care of adults with one or more complex, acute, or chronic illnesses, both in the hospital and in the community. It is patient-centred, scientifically based and committed to ethical, scientific and holistic principles of care.

Rapid changes are provoking both professional and personal identity crises in internal medicine. In the recent past, internal medicine has attempted to train both primary care and specialty internists. Since the knowledge, skills, and aptitudes required for primary care and specialty practice are quite different, these two groups of internists are now struggling to find a common identity. For decades, the breadth and diversity of internal medicine was assumed to be one of its strengths. Most of the discussion on the conflicts between general and specialty medicine in internal medicine has focused on whether internal medicine is a primary care or specialty discipline. Given its size, specialists have argued that internal medicine must play a major role in the effort to meet the nation's needs for proper specialized medical care.

This article supports the position that the common ground shared by the specialist internists, academician and practitioner could be reestablished, and the future of internal medicine secured, if internists returned to their historic role as consulting physician-scientists.

Historical background:

What we now know as internal medicine evolved from "Innere Medizin" in Germany and Austria in the early 1880s. This discipline focused on the application of a scientific rationale for medical practice based on advances in physiology, bacteriology, and pathology. First reference to internal medicine in the United States was made by Osler and his associates in the American Association of Physicians in 1885. They perceived the need for academic physicians, supporting themselves in part through their private consultative practices, who founded their practice of medicine on principles of basic science, particularly pathology. They envisioned hospital-based, academically affiliated internal medicine physicians serving consultant, diagnostic roles "in every hospital with 50 beds or more" throughout the country. Osler and his colleagues were generalists in the sense that they did not specialize in diseases of one organ system or another or perform

specialized procedures. They also consulted in their hospitals' outpatient departments.¹ However, in spite of revisionist attempts to paint internal medicine at its heart as a primary care discipline, it is impossible to deny the historic roots of internal medicine as an elitist, consultant, hospital-based, and academically oriented discipline. These roots continue strongly in internal medicine to this day.

Role of Internal medicine:

Internal Medicine is the core medical discipline that is responsible for the care of adults with one or more complex, acute, or chronic illnesses, both in the hospital and in the community. It is patient-centre, scientifically based and committed to ethical, scientific and holistic principles of care. Historically Internal Medicine contributed to the total progress of Medicine. They efficiently managed patients with multiple system disease. Played a central role in educating under and post graduate trainees. They gathered high level of skill in all areas. Some of them focused on improving skill on a sub specialty. They also contributed enormously to medical research.

Evolution of Sub Specialty:

From early 70s a group of Internists with specialized skill started to train their next generation specialists in a specific field of Internal medicine. These specialists wanted the recognition of their skills. American Board started to give certification for their specific skill as Sub specialty.

Industry started to patronize the sub specialties as they identified billion Dollar business opportunity. A big industry developed around a sub specialty technical skill.

Consequences of emergence of Sub specialty:

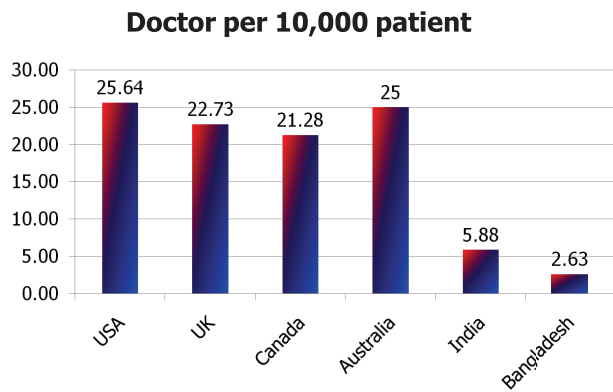
After emergence of sub specialty, the patient care became fragmented. The sub specialists started to put a threat on domains of Internal Medicine. As a consequence health care became very expensive. We started to witness unnecessary use of Sub Specialty skills and devices when it was not indicated. Eventually the Patients became the main sufferer of this situation as they are not getting comprehensive specialty management.

Globally less and less Internists were created in last 20 years; resulting in an acute shortage of this core specialty. This phenomenon was increasingly addressed by different

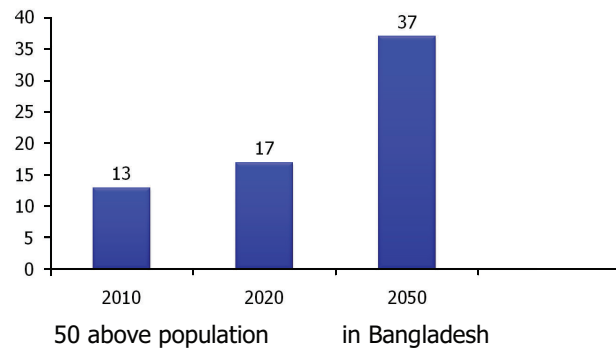
countries. In 2008 JAMA published an article which stated that “Critical shortage of internal medicine MDs foreseen in USA”. Annals of Internal Medicine also published an article in 2012 which stated that “US Facing Drastic shortage of General Internists”. UK Border agency declared a Shortage occupation list which includes Internal Medicine (Acute) along with Biological scientists and biochemists , Engineering geologist, Meteorologists, so that immigrants with these specific specialty are encouraged to stay in UK. ^{2,3,4}

Why there is global cry about shortage of General Internal Medicine?

The students complained that internal medicine required more paperwork and study, lengthy training period, a greater breadth of knowledge and skill, on the top of that they would get less pay than more lucrative sub specialties.



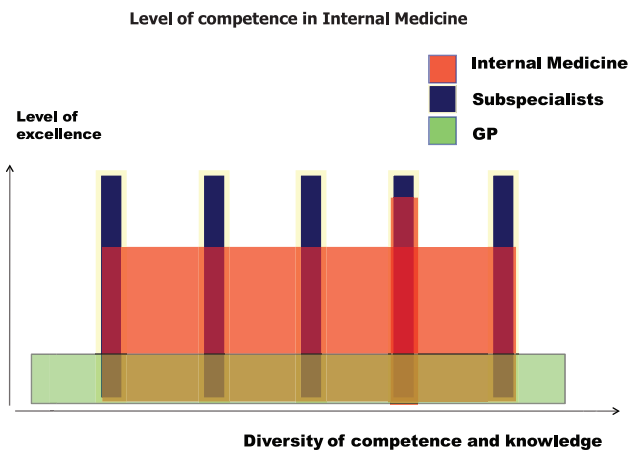
Aging people are growing with multiple co morbidities



This growing number of aged population shall require management of multiple chronic diseases. It is the elderly who account for most medical care needs of the population. The elderly accumulate chronic, degenerative diseases that interact, increasing the complexity of care. Most physicians who manage these patients must consider their patients’

medical problems in concert, not piecemeal , although the elderly will also need some specialized physicians and surgeons with the skill to repair body parts (for example, hearts, lungs, hips, and eyes) as they wear out.

Moving around to multiple sub specialties would exponentially increase the cost and only Internal Medicine can provide comprehensive management for patients with co morbidities. ⁵



If we characterize the diversity of competence of knowledge and level of excellence of GP, Medicine specialists and sub specialties, then we will see Medicine specialists are able to offer high level of technical skill in all areas and perhaps can sharpen their skill in a particular area to offer very level of specialist care in one or two areas.

Internal Medicine can reestablish their core role in following areas ⁶ :

- Patient Care
- Medical knowledge
- Communication skills
- Professionalism
- Academic activities
- Organization and leadership

Internal medicine specialists have competence and ability to provide excellent outpatient care including best indoor patient care. They can perform following interventions in hospital settings. And they should never refer them for these interventions.

- Plural fluid aspiration/ Intercostal drainage
- Plural biopsy
- Ascitic fluid aspiration
- USG guided biopsy/aspiration/Liver biopsy
- Lumber puncture
- Bone marrow aspiration

- Skin/Muscle/superficial node biopsy
- Intra articular Injections
- Internal Jugular line/Intubation
- Endoscopy/Colonoscopy/Fiber Optic bronchoscopy

Internal medicine specialists can lead the Academic activities. The following rules can be followed.

- Undergraduate students should be solely placed under Internal Medicine units from 3rd-5th year.
- Only short rotation in Interventional sub specialties can be allowed for 5th year students to see and know about the procedures done before exam. (not exceeding one week).
- Play leading role in
- Grand rounds
- Journal Clubs
- Case presentations
- Research activities
- Structured training for any sub specialties must be done under Internal Medicine.

Internal medicine can play a pivotal role in Liaison with sub specialty for proper management of the patient when required.

- Make a mutually respectable understanding with sub specialty units/Sub specialists.
- Make a understanding/guideline when and to whom you are going to refer a case?

Nevertheless professionalism in internal medicine is of utmost importance. They have to maintain highest level of skill, they have to improve communication skill and they should try to become a role model in medical profession.

Conclusion

21st Century poses an enormous challenge for Internal Medicine specialists. There will be an increasing demand of Internists for efficient, comprehensive yet affordable patient care and medical education. We have to achieve and maintain highest level of professional excellence for maintenance of our demand and dignity.

Conflict of Interest : None

FM Siddiqui

Professor of Medicine

20th January, 2013

References:

1. Huddle T S, Centor R, Heudebert G R. American Internal Medicine in the 21st Century: Can an Oslerian Generalism Survive? *J Gen Intern Med*, 2003; 18 : 764-768
2. Larson E B, Fihn S D, Kirk L M, Levin W, Loge R V, Reynolds E et al. The Future of General Internal Medicine. *J Gen Intern Med*. 2004; 19(1): 69–77.
3. Bauer W, Schumm-Draeger P M, Koebberling J, Gjoerup T, Alegria J J G, Ferreira F et al. Political issues in internal medicine in Europe. *European Journal of Internal Medicine* 16 (2005) 214 – 217
4. Fletcher R H, Fletcher S W. What Is the Future of Internal Medicine? *Ann Intern Med*. 1 December 1993; 119(11): 1144-1145
5. Fournier A M. Resolving the Conflicts between General and Subspecialty Medicine: The Internist as Consulting Physician-Scientist. *Am J Med*. 104:259 –263.
6. Kramer M H, Akalin E, Alvarez de Mon Soto M, Bitterman H, Ferreira F, Higgins C et al. Internal medicine in Europe: how to cope with the future? An official EFIM strategy document. *Eur J Intern Med*. 2010 Jun; 21(3): 173-5.