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LETTER

Gastroenterology in India—some considerations

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The European brand of research universities, in the early twentieth century, became the role model for American Universities such as Harvard and Cornell [1]. Countries like India and China with rapidly growing economies need such role-models. India with a population of 1.2 billion is struggling to organize its research and Hepatogastroenterology (HGE) training, and to meet the requirements of not only the urban population, but also the rural underprivileged, who comprise over 70% of its population.

The Medical Council of India (MCI), determines the training curriculum for all medical specialties in India. Three senior professors of HGE are at present revising the current curriculum.

The MCI website states that there are 75 HGE positions per year in 27 training centres. However there are 299 medical colleges in India which means that only about 10% of the medical colleges undertake formal HGE-training. Studies are required to clarify the logistics and the access to become an HGE-training centre [2]. Proper HGE access for the Indian population should be an issue. For the last 10–15 years private hospitals in India have been assisting in the manpower development of medical specialists. Data about these developments are lacking in Indian literature. The common trend is that Indian specialists training abroad are reluctant to return to India and those trained in India leave the country to accept posts abroad.

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The Indian Society of Gastroenterology (ISG) started in 1958 certainly helped in disseminating knowledge through its annual conferences [3].

The World Gastroenterology Organisation (WGO) recommends one gastroenterologist for every 50,000 population. At that rate, at least 20,000 HGE-specialists are required for India. India lacks at least 10,000–15,000 HGE-specialists [3]. The number of board-registered HGE-specialists today is around 1,000. HGE-trainers need to increase the number of training centers and seats for fellows per center [4, 5].

Need

Food and water borne diseases, parasitic diseases, *Helicobacter pylori* and viral hepatitis, etc., are priority diseases for HGE. Clinical trials are likely to be conducted more frequently in India, because this is where sufficient patients and professionals reside and where research results are to be implemented. As there is a paucity of good collaborative research in India there is a need to create a research network among like-minded people.

Research during HGE specialist's training

The WGO has not yet incorporated research training in their proposed HGE-curriculum, despite the decline in physician-scientists in HGE [6]. In order to increase research, it has been advocated that there should be more opportunities for medical students to undertake research. Mentoring and funding for HGE-fellows in research should be improved [7]. The Indian HGE curriculum hampers research. Research experience as a medical student is important [8]. Medical students interested in HGE should

be encouraged to attend regional meetings and national society meetings for free.

However, clinicians often tend to go the "easier way"; i.e. proceeding to publishing individual cases rather than collecting a number of cases and publishing valuable case series, or prospective studies.

Research topics in India

Diarrheal diseases, *Helicobacter pylori*, infection from hepatitis viruses A, B, and E, and intestinal tuberculosis affect India disproportionately [9]. India needs more data on such diseases. The Indian Society of Gastroenterology needs adequate epidemiological data about cancers of the esophagus, stomach and colon to plan future programs [4, 10].

So far, only a limited number of Indian institutes encourage research and have a well-structured HGE-training. Data on special training should be evaluated and published [2, 11]. The reasons leading to "brain-drains" from India to North America, the UK and Australia is another topic that needs to be evaluated [2].

Discussion

Establishing Task Forces in Endoscopy, Nutrition, Digestive Oncology and Hepatology should generate high quality investigator-initiated research regarding training and differentiation of HGE in India.

The massive increase in medical student numbers underscores the need to increase the number of training centers for these students in specializations to prevent further "brain-drain". India is already the model for South-Asia with regard to the organization of medical training. However there is a lack of articles about specialist training. Involvement in these unmet needs of publishing unquestionably strengthens the Indian scientist pool of the future [6].

Formal subspecialty training programs in HGE and GE-surgery started in the 1970's—and 80's in rapidly developing countries like India. Due to the efforts of the first generation of gastroenterologists, the quality and quantity of educational and training programs are improving rapidly. There is a lack of structure and funding for training in HGE in India which create barriers for posts for pursuing a HGE career [3]. One solution to this (financial) problem would be to change the training for sub-specialties such as cardiology, rheumatology and HGE to an internal track of 2 years instead of the full training in Internal Medicine currently required [4]. Such a system is already the standard in Europe and the USA.

A Task Force of ISG, in close cooperation with the MCI should develop and implement a master plan for at least 100 training centers for HGE. Practical recommendations for the initiation of studies should be organized and discussed at the ISG-conference.

The future of HGE in India is bright. Data about the evolution of this specialty is required. There is also a need to increase the number of HGE trainees to 300–400 in the years to come. The large pool of Indian trainers settled abroad for "expat" contracts of 1–2 years could help support the development of new HGE-training centers in India. Senior trainers from developed nations may be willing to join local Indian trainers for short periods of 3–6 months. Private hospitals with large number of patients and excellent facilities should be brought in to provide modern HGE training. The ISG should work together with MCI, to facilitate this.

The MCI, responsible for training at least 30 medical specialties in 299 medical colleges, seems a "mission impossible". Only with strong support of the national societies, like ISG can the MCI succeed in their task of setting up around 10,000 training centers for various specialties.

References

1. Arai K, Chech T, Chameau JL, et al. The future of research universities. EMBO Rep. 2007;8:804–10.
2. Mulder CJ, Reddy DN, Puri AS. Gastroenterology training in private hospitals: India vs South Africa. World J Gastroenterol. 2010;16:948–52.
3. Tandon R. Progress of gastroenterology in India. Indian J Gastroenterol. 2007;26 Suppl 1:S31–4.
4. Telleman H, Burger TF, Mulder CJ. Evolution of gastroenterology training. World J Gastroenterol. 2009;15:1793–8.
5. Mulder CJ. Is the future of Romanian Gastroenterology bright? J Gastrointestin Liver Dis. 2010;19:243–4.
6. Nathan DG. Clinical research: perceptions, reality, and proposed solutions. National Institutes of Health Director's Panel on Clinical Research. JAMA. 1998;280:1427–31.
7. Wells RG. Building a better pipeline: the case for undergraduates in gastrointestinal research. Gastroenterology. 2007;133:740–1.
8. Balon R, Heninger G, Belitsky R. Medical school research pipeline: medical student research experience in psychiatry. Acad Psychiatry. 2006;30:16–22.
9. Pulimood AB, Amarapurkar DN, Ghoshal U et al. Differentiation of Crohn's disease from intestinal tuberculosis in India in 2010. Department of Gastrointestinal Sciences, Christian Medical College, Vellore, Tamil Nadu, India. World J Gastroenterol. 2011;17:433–43.
10. Blokhuis MM, Pietersen GE, Goldberg PA, et al. Lynch syndrome: the influence of environmental factors on extracolonic cancer risk in hMLH1 c.C1528T mutation carriers and their mutation-negative sisters. Fam Cancer. 2010;9:357–63.
11. el-Zayadi A. Problems of education and training in gastroenterology in the Middle East and Africa. Scand J Gastroenterol Suppl. 1988;144:90–3.