

Factors Affecting Choice of Future Specialty among Medical Students

Dear Editor,

We read with interest the article by Kumar *et al.*, where the authors have evaluated the future career interests and factors that influence undergraduate medical students' choice of specialty.^[1]

A medical specialization encompasses transition from an undifferentiated medical graduate to the fully differentiated professional who is usually restricted to one specialized field of medical work. The medical specialty chosen by the medical student has important implications for both the practitioner as well as the national community. It is critical in determining the future supply of doctors in different specialties and the planning of the workforce for the healthcare services. In the present study, some interesting trends can be seen. Although the male students were interested in only internal medicine or surgery, the females preferred obstetrics and gynecology the most. The most alarming finding being that none of the students in China, Sri Lanka, India, and Nepal preferred pediatrics. Also while the questionnaire used in the study had an option for public health and social medicine, apparently none of the students opted for them. This problem has been highlighted time and again and underlines the issues in achieving health equity and limits the access of people living in rural and underserved areas to trained health manpower. Although nearly one half of world population resides in rural areas, they are served by less than a quarter of available physician workforce. The World Health Organization (WHO) has suggested principles and evidence-based recommendations to improve rural retention of doctors.^[2] The educational recommendations include the use of favorable admission policies for students with rural background, location of medical schools and campuses outside of major cities, exposing undergraduates to rural community postings, inclusion of rural health topics in undergraduate and postgraduate curricula, and planning of continuing medical education and professional development programs that address the needs of rural health workers. The current bias of study sample in favor of urban students is one of the possible reasons for none of the students opting for public health as specialty of choice. The study also involves only specific medical schools in

these five countries and may not be generalized to South Asian Association for Regional Cooperation (SAARC) nations as a whole. However, the study highlights the need for these developing countries to reassess their existing policies and introduce and/or reinforce the suggested reforms to ensure a stronger workforce in the rural areas.

Also the basic medical sciences were neglected as a choice of specialization by all students across the five study settings. We also feel that students in first year Bachelor of Medicine and Bachelor of Surgery (MBBS) program have limited exposure to the clinics and thus their career choices are likely to be influenced at later stages of their education by various factors like perceived academic and career opportunities, societal/family expectations, effects of role models among supervisors, faculty and residents, work-related hazards, opportunities to perform procedures and urgent interventions, prospects of working in an urban setting, difficulty level of training, number of practice work hours per week, opportunities to work independently in the specialty, type of problems and patients encountered, and likely patient outcomes.^[3-5] In addition, a previous study has shown that students in their clinical phase of study are more likely to decide a future medical specialization than students in their basic sciences phase of medical education.^[3] The range of career options available to a medical graduate has become even broader as a result of the emergence of several new subspecialties within the traditional specialties. The fact that none of the students opted for prestige, respect, and status is discordant with previously reported studies.^[3,5,6] There are individual differences in the medical curriculum among these countries that might have affected the study results, e.g. the first year MBBS students in India have little exposure to paraclinical subjects like pathology, microbiology, and pharmacology. This might be one of the reasons for their lack of awareness and inclination toward these basic medical sciences.

Possible ways of enabling undergraduate medical students to make informed choices regarding postgraduate specialties need to be explored. Efforts should also be made to enhance the attractiveness of medical specialties facing considerable manpower shortages to address the current and future healthcare needs of the nation. The medical schools in developing countries can introduce medical laboratory internships and modules based on research and laboratory medicine that can help to inculcate student's interest in research and basic medical sciences. Another intervention includes introduction of mentoring programs and formal career counseling. Such mentoring programs

during undergraduate training can positively influence student's interest in careers in public health and basic medical specialities.

Ashish Kumar Kakkar, Neha Dahiya¹

Department of Pharmacology, All India Institute of Medical Sciences, Bhopal, Madhya Pradesh, India,

*¹Department of Preventive and Social Medicine, Lady Hardinge Medical College, New Delhi, India
E-mail: drashishkakkargmail.com*

References

1. Kumar A, Mitra K, Nagarajan S, Poudel B. Factors influencing medical students' choice of future specialization in medical sciences: A cross-sectional questionnaire survey from medical schools in China, Malaysia and regions of south Asian association for regional cooperation. *N Am J Med Sci* 2014;6:119-25.
2. WHO. Increasing access to health workers in remote and rural areas through improved retention. Global policy recommendations. 2010 [cited 2014 Mar 11]. Available from: http://whqlibdoc.who.int/publications/2010/9789241564014_eng.pdf
3. Al-Fouzan R, Al-Ajlan S, Marwan Y, Al-Saleh M. Factors affecting future specialty choice among medical students in Kuwait. *Med Educ Online* 2012;17. (Accessed March 11, 2014, at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3529360/>).
4. Chang PY, Hung CY, Wang KI, Huang YH, Chang KJ. Factors influencing medical students' choice of specialty. *J Formos Med Assoc* 2006;105:489-96.
5. Dikici MF, Yaris F, Topsever P, Tuncay Muge F, Gurel FS, Cubukcu M, *et al.* Factors affecting choice of specialty among first-year medical students of four universities in different regions of Turkey. *Croat Med J* 2008;49:415-20.
6. Khader Y, Al-Zoubi D, Amarin Z, Alkafagei A, Khasawneh M, Burgan S, *et al.* Factors affecting medical students in formulating their specialty preferences in Jordan. *BMC Med Educ* 2008;8:32.

Access this article online

Quick Response Code:



Website:

www.najms.org

DOI:

10.4103/1947-2714.131247