

The Growth of Medical Student Opportunities in Global Health

Johnathan Kao, MPH*

College of Human Medicine, Michigan State University, Flint, MI, USA

*Corresponding author: Johnathan Kao; johnathan.kao@msrj.org

Since the establishment of the World Health Organization on April 7, 1948,¹ global health has grown in prominence and popularity among health care workers at all levels of training. International clinical rotation electives have been available to students for over half a century² and interest in these programs has risen steadily over the decades. During this period, many organizations established programs for students and faculty interested in global health research and service. In 2006, these organizations united under the WHO's Global Health Workforce Alliance to assist students and faculty in becoming more involved in global health activities.³ Despite these changes, in 2007, Drain et al. recognized a lack of global health education in medical schools and growing student interest, calling for more opportunities to fill the gap.⁴ Since then, nearly all US medical schools have created opportunities for students to engage in study or service on the international stage.⁵ The 2013 Association of American Medical Colleges survey of graduating US medical school students found that 30.2% of graduates participated in global health experiences,⁶ an increase of nearly 25% since the first Graduation Questionnaire was administered in 1978.⁵ A current search on the American Medical Student Association website for International Health Opportunities generated a list of 319 programs, including experiences through medical schools, governmental programs, and non-governmental organizations. The variety of opportunities allows students to serve in many different capacities, from hands-on clinical experiences to immersion learning of different languages.

Multiple surveys have shown that the majority of students who have participated in international experiences have had positive experiences and most would recommend these opportunities to their colleagues.⁷⁻⁹ Reviews and evaluations of these programs, however, have not all been positive. Concerns about the impact of medical missionaries have been raised, ranging from

the exploitation of the local population to the safety of the student participants.¹⁰ One analysis showed that some short-term groups may actually erode the health of the local populace due to the provision of sporadic care as well as 'quick fix' solutions that students can complete in their time there instead of more long-term options.¹¹ To help other programs address these concerns, Suchdev et al. devised a model for international health mission trips with guidelines to help ensure that such trips are able 'to ethically address underlying health issues and to provide sustainable public health interventions and medical assistance for underserved communities in developing countries.'¹⁰ In addition, the Working Group on Ethics Guidelines for Global Health Training (WEIGHT) drafted specific guidelines to help enhance the educational value of the programs and ensure the safety of patients and students.¹² The Association of American Medical Colleges also drafted their own guidelines in 2011 for students participating in international clinical experiences.¹³

Recently, a study examined the impact of short-term missions from the perspective of the patients. Patients from a short-term mission to the Dominican Republic were surveyed on issues ranging from language barrier to student involvement. These patients did not feel that their care was substandard. Also, the language barrier was not perceived to be an issue and student involvement, when well-supervised, was viewed as positive, with one interviewee stating, '[I feel] very good because when you are practicing on me you are studying. You need to practice because medicine is 50% theory and 50% practice.'¹⁴

Studies of global health experiences have also found many benefits to these short-term medical missions. As the patient population in the United States continues to diversify, cultural competency is becoming a more vital element of an effective physician. An understanding of cultural issues became an established part of medical education with the inclusion of 'interpersonal

skills' as one of the six core competencies established by the Accreditation Council of Graduate Medical Education in 2007. This requires that all residents be able to 'communicate effectively with patients, families and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds'.¹⁵ Language and cultural barriers can impair quality of care, particularly in low-income areas. While a week-long medical mission is not enough to overcome these barriers, one study showed that immersion in another culture in the form of study abroad fostered a stronger ability to interpret the behaviors of others in a broader cultural context,⁹ teaching students how to ask the right questions when confronted with cultural differences and enhancing their ability to view patient behaviors in the proper cultural context. A literature review of international health electives in medical school also found that participants had a deeper understanding of global and public health issues, scoring higher on these sections on National Board of Medical Examiners (NBME) examinations.¹⁶ As an added benefit, the review indicated that participants were more likely to go into primary care fields and work in underserved areas,¹⁶ providing a potential source of primary care providers to ease the worldwide shortage.

Combining clinical training with an exploration of global health issues, short-term medical missions are a unique opportunity for medical students to develop their clinical skills and deepen their understanding of social and cultural issues in medicine. As patient populations grow increasingly diverse, an understanding of cultural and global issues in health care is becoming an essential component of medical education. Participating in international health missions allows students to develop a stronger understanding and gain a personalization of these issues, enhancing the social acumen of future clinicians and raising the level of debate in the discussion of global health issues. In response to the many early criticisms of these programs, there has been an outpouring of research supporting the efficacy of these programs and highlighting the positive responses from both patients and students. Multiple studies on the effectiveness and impact of these programs have unmasked many of the risks, and guidelines have been established to address these issues. However, continued evaluation would not be remiss to further strengthen these programs and ensure patients and students get the most out of these beneficial, and costly, experiences. The development of these programs over the years has grown international medical missions into a popular pedagogical tool that also serves to inspire students to

further explore cultural, primary care, and global health issues. With an ever-growing need for international health workers and an increasingly diverse patient population, it is time for international health experiences to grow from an extracurricular activity into an integral part of medical education.

REFERENCES

1. World Health Organization (2014). History of WHO. Available from: <http://www.who.int/about/history/en/> [cited 21 June 2014].
2. Bissonette R, Route C. The educational effect of clinical rotations in nonindustrialized countries. *Fam Med* 1994; 26(4): 226–31.
3. World Health Organization (2014). Global Health Education Consortium. Available from: http://www.who.int/workforcealliance/members_partners/member_list/ghec/en/ [cited 21 June 2014].
4. Drain PK, Primack A, Hunt DD, Fawzi WW, Holmes KK, Gardner P. Global health in medical education: a call for more training and opportunities. *Acad Med* 2007; 82(3): 226–30. doi: 10.1097/ACM.0b013e3180305cf9.
5. Hag C, Rothenberg D, Gjerde C, Bobula J, Wilson C, Bickley L, et al. New world views: preparing physicians in training for global health work. *Fam Med* 2000; 32(8): 566–72.
6. AAMC (2013). Medical school graduation questionnaire: all school summary report. Available from: https://www.aamc.org/download/350998/data/2013_gqallschoolssummaryreport.pdf [cited 21 June 2014].
7. Imperato PJ. A third world international health elective for U.S. medical students: the 25-year experience of the State University of New York, Downstate Medical Center. *J Community Health* 2004; 29(5): 337–73. doi: 10.1023/b:johe.0000038652.65641.0d.
8. Pust RE, Moher SP. A core curriculum for international health: evaluating ten years' experience at the University of Arizona. *Acad Med* 1992; 67(2): 90–4. doi: 10.1097/00001888-199202000-00007.
9. Haq C, Rothenberg D, Gjerde C, Bobula J, Wilson C, Bickley L, Cardelle A, Joseph A. New world views: preparing physicians in training for global health work. *Fam Med* 2000; 32: 566–72.
10. Suchdev P, Ahrens K, Click E, Macklin L, Evangelista D, Graham E. A model for sustainable short-term international medical trips. *Ambul Pediatr* 2007; 7(4): 317–20. doi: 10.1016/j.ambp.2007.04.003.
11. Montgomery LM. Short-term medical missions: enhancing or eroding health?. *Missiology* 1993; 21(3): 331–41. doi: 10.1177/009182969302100305.
12. Crump JA, Sugarman J, Working Group on Ethics Guidelines for Global Health Training (WEIGHT). Ethics and best practice guidelines for training experiences in global health. *Am J Trop Med Hyg* 2010; 83(6): 1178–82. doi: 10.4269/ajtmh.2010.10-0527.

13. AAMC GSA Steering Committee (2011). Guidelines for premedical and medical students providing patient care during clinical experiences. AAMC. Available from: <https://www.aamc.org/download/181690/data/guidelinesforstudentsprovidingpatientcare.pdf> [cited 21 June 2014].

14. DeCamp M, Enumah S, O'Neill D, Sugarman J, Evangelista D, Graham E. Perceptions of a short-term medical programme in the Dominican Republic: voices of care recipients. *Glob Public Health* 2014; 9(4): 411–25. doi: 10.1080/17441692.2014.893368.

15. Accreditation Council of Graduate Medical Education (2013). Common program requirements. ACGME. Available from: <https://www.acgme.org/acgmeweb/Portals/0/PFAssets/ProgramRequirements/CPRs2013.pdf> [cited 21 June 2014].

16. Thompson MJ, Huntington MK, Hunt DD, Pinsky LE, Brodie JJ. Educational effects of international health electives on U.S. and Canadian medical students and residents: a literature review. *Acad Med* 2007; 82(3): 226–30. doi: 10.1097/00001888-200303000-00023.