

6-1-2018

The relevance of global health training in medical education – a plea for a global health curriculum

Mieke van Driel

Faculty of Medicine, University of Queensland Brisbane, Australia, m.vandriel@uq.edu.au

Leonardo Seoane

Faculty of Medicine, University of Queensland, Ochsner Health System as second affiliation New Orleans, Louisiana, USA, m.vandriel@uq.edu.au

Follow this and additional works at: <https://impressions.manipal.edu/mjms>



Part of the [Medicine and Health Sciences Commons](#)

Recommended Citation

Driel, Mieke van and Seoane, Leonardo (2018) "The relevance of global health training in medical education – a plea for a global health curriculum," *Manipal Journal of Medical Sciences*: Vol. 3 : Iss. 1 , Article 8.

Available at: <https://impressions.manipal.edu/mjms/vol3/iss1/8>

This Review is brought to you for free and open access by the MAHE Journals at Impressions@MAHE. It has been accepted for inclusion in Manipal Journal of Medical Sciences by an authorized editor of Impressions@MAHE. For more information, please contact impressions@manipal.edu.

The relevance of global health training in medical education – a plea for a global health curriculum

Mieke van Driel*, Leonardo Seoane

Email: m.vandriel@uq.edu.au

Abstract

There has been an increasing demand for global health experiences from medical students. Many embark on short-term elective experiences arranged by the students themselves without learning objectives or in some incidences without appropriate supervision. Recently published guidelines address the concerns with short-term global health electives regarding the host, sending site, and students. The authors review the literature and speak on the value of global health training through the perspective of the partnership with the University of Queensland, Australia and Ochsner Health System, United States and the partnership of the University of Queensland with Manipal Academy of Higher education (MAHE), India.

Key words: Global health, medical education, medical curriculum, medical students, clinical experiences

Growing demand for global health experiences

Despite the nationalist movements occurring in many countries in the world today, there is a growing trend among medical students to seek clinical experiences outside of their home countries. For instance, only 6% of American medical students participated in international experiences in 1978,¹ but this had increased almost fivefold by 2017 when 27% reported a global health experience.² An Australian survey found even higher numbers: between 2006 and 2010, 50% of medical students participated in an international elective, with the majority of these (59%) in resource-limited settings.³ Driven by a desire to help underprivileged populations, to learn about different cultures and curiosity to explore

the world, overseas electives are popular with medical students worldwide. Many current medical students have international travel experience and want to give back to less privileged regions of the world.⁴ Most universities in high-income countries encourage such electives and students themselves have taken an active role in facilitating overseas experiences. A myriad of student-led international health organizations have emerged in medical schools over the past 2 decades.⁵ At the University of Queensland (UQ), “Towards International Medical Equality” (TIME) was established 14 years ago. TIME promotes a focus on equitable healthcare at home and abroad through activities ranging from on campus events to raise awareness or funds, to partnerships with hospitals and organizations overseas.⁶ Each year, UQ students participate in the global health conference where like-minded peers from all over Australia and New Zealand join to discuss global health issues.⁷ Similar initiatives occur in other countries such as the UK⁸ and USA.⁹ In response to the high student demand, the Alliance of Academic Medical Centers in the USA established Global Health Learning Opportunities (GHLO®).¹⁰ GHLO facilitates medical and public health students’ rotations through a network of participating

Mieke van Driel

Professor

Chair of General Practice, Head Primary Care Clinical Unit
Faculty of Medicine, University of Queensland
Brisbane, Australia

Leonardo Seoane

Associate Professor, Head Ochsner Clinical School
Faculty of Medicine, University of Queensland, Ochsner Health
System as second affiliation New Orleans, Louisiana, USA

*Corresponding Author

Manuscript received: 26/3/2018

Revision accepted: 16/5/2018

How to cite this article: van Driel M, Seoane L. The relevance of global health training in medical education – a plea for a global health curriculum. *MJMS*. 2018; 3(1): 28-32.

institutions across the world. In the light of all this enthusiasm and dedication, it is important to define what global health actually encompasses.

Defining global health

The world today is more connected than ever before in history. Technology allows immediate communication 24 hours a day, but the extensive mobility of people around the globe also implies physical connectivity. An infection emerging in one part of the globe can easily travel to other parts as we have seen in recent outbreaks of avian influenza and Ebola. Moreover, armed conflict and natural disasters fed by climate change have forced large populations out of their homes. In 2016, UNHCR reported 67 million displaced people worldwide, the largest number since the Second World War.¹⁰ Migration has enhanced diversity, but also increased the need to understand and respond to cultural diversity in health care. Today's doctors require cultural competency as much as clinical skills.

Global health as a term is relatively new. It fits seamlessly in today's "globalized world", but has its roots in a long tradition of geographical exploration and colonial expansion. Where the 19th century concept of "tropical medicine" studied exotic tropical diseases and trained health professionals to work in (usually) tropical countries with limited resources, 20th century "international health" acknowledged collaborations between nations to address health issues of interest to all parties. In the 21st century, "global health" takes this a step further by emphasizing the importance of equity in health for all people worldwide.¹¹ This also means that global health is a two-way street. Health inequities exist in all countries and some low- and middle-income countries have made more progress in addressing these than high-income countries. Therefore, "global health experiences" are not necessarily synonymous with overseas travel, but can be found on everyone's doorstep and include caring for disadvantaged communities in the home country.

Benefits of global health experiences

The benefits of international experiences are well documented in the literature. Overseas electives are often described by students as a "highlight" and an

event that changed their personal and professional perspective.^{1,12,13} Students report better clinical skills and increased confidence, perhaps because they learned how to cope with limited access to laboratory tests or expensive diagnostic procedures. They are more sensitive to cost issues, which is crucial in the context of increasing health care costs and ever-tightening budgets. Students who participate in global health placements also tend to choose primary care as a career more often and are more likely to practice in underserved areas.¹² Since many countries (high- and low-income alike) struggle with a skewed distribution of health services favouring large metropolitan areas and prosperous populations, there is a great need for physicians in disadvantaged locations and communities. International health experiences also generate a greater appreciation of public health as an integral part of practicing medicine. Public health topics are generally not popular with medical students who prefer to focus on developing the clinical skills associated with a "real doctor". As population health concepts are increasingly incorporated into primary care and the need to understand the social determinants of health is valued, global health experiences become important ways to teach these concepts to medical students. Knowledge and experience of different methods of care delivery create a more open mind and may inspire the design of more effective and efficient care delivery in the home country by future generations. Healthcare disparities continue throughout developed countries and a lack of cultural competence continues among healthcare workers.¹⁴ Cultural awareness and experience with cross-cultural communication is useful in addressing these inequalities, regardless of where the medical students eventually choose to practice.^{1,12}

Risks to students and patients

Although international experiences improve the quality of our medical workforce, several authors have raised concerns about potential harms to both students and the patients they encounter.^{15,16} The noble intention to "help" those in need is to be encouraged, but without adequate preparation, it can easily backfire. Students' health and well-being can be at risk if they are ill-prepared for

local endemic risks (e.g.: malaria) or are unaware of local geo-political circumstances, such as conflict or natural disasters. The potential harm to patients and communities should not be underestimated. It is not uncommon that students find themselves in situations where they can practice beyond their competence. For instance, seeing patients without supervision from an experienced clinician in a busy outpatient clinic or even performing surgery while lacking basic surgical training. Students may feel that underserved communities are better off with an inexperienced medical student than with poorly trained medical staff or none at all? Shah calls for ethical standards to guide global health experiences.¹⁶ Crump and Sugarman formed the Working Group on Ethics Guidelines for Global Health Training (WEIGHT) to develop ethics and best practice recommendations.¹⁷ In 2014, the International Federation of Medical Student Associations (IFMSA) took this task into their own hands and released a policy statement for “ethical medical placements abroad”.¹⁸ They plead for compulsory pre-departure training, placements linked to ongoing partnerships, removal of financial barriers and aligning aims and assessments of placements to global health learning outcomes. The University of Queensland Ochsner clinical rotation in Haiti is an example of how these standards can be implemented.¹⁹ Once a year, a small group of medical students travel to Haiti under supervision of experienced clinicians as part of an ongoing partnership between the Ochsner Health System in Louisiana, USA and the government of Haiti. Their pre-departure program involves medical (local endemic diseases), technical (laboratory tests in the field), cultural and language training as well as experiences in local clinics that service underserved populations in New Orleans. Their learning goals and assessment are linked to the “Medicine in Society” course curriculum with a focus on understanding medicine in context of their patients’ culture and environment. Students who have taken part in this course report that the experience has given them a new perspective on medicine, an appreciation of caring for patients in the context of scarcity and especially, demonstrated the practical application of their oath “first do no harm”.¹⁹ Well supported, properly prepared and

managed, global health experiences can be career defining, help develop a student’s professionalism, and embed enduring compassion in the next generation of health professionals.^{19,20}

Need for formalized curriculum

Preparation before embarking on an overseas elective is important, but the need for global health to be part of the formal medical curriculum percolates through all global health literature. Many universities and residency programs, especially the primary care oriented ones, offer international health experiences. A growing number of institutions offer formal global health degrees, but integration of global health within the core medical curriculum is still scarce. Elements of global health, such as comparison of health systems and global burden of disease or the impact of poverty of health may be covered, but global health is seldom a course in its own right.²¹ Some enlightening examples exist. The Harvard Medical School, for instance, introduced a “Social Medicine and Global Health” course for all first year medical students in 2007.²² Starting from the principle that ‘all medicine is social medicine’, students learn to include the social, economic and political factors that influence health and access to health care into their clinical thinking, an essential skill for all contemporary (global) doctors. In India, Pati identified a number of courses related to global health, however only few of these were part of a medical degree program.²³ Programs wishing to develop a global health course may be guided by Battat’s summary of the literature on global health competencies.²⁴

Global Health partnerships

An essential ingredient of Koplan’s global health definition is the partnership between institutions. So far, we have discussed initiatives that essentially consist of students travelling to foreign and/or underserved settings. Addressing health inequities requires true partnerships built on reciprocity and bilateral exchange. Adams lists a number of core competencies that guide such partnerships, including shared leadership, and prioritizing the needs of trainees from low- or middle-income countries over those from high-income countries.²⁵ Over the past decade, the number of partnerships between

academic institutions, health systems, governments and not-for-profit organizations has been growing. The Australian University of Queensland, the Louisiana-based Ochsner Health System and Manipal Academy of Higher Education have embarked on a pathway to developing such a partnership. Already medical students from Australia and the USA have enjoyed opportunities to learn from experienced clinicians alongside their peers from Kasturba Medical College of the Manipal Academy of Higher Education, India. They have returned home with a wealth of experiences and appreciation for clinical practice in resource challenged settings. Growing the partnership will consolidate this learning, but also offers opportunities for faculty exchange, research collaborations and bilateral student mobility. The impact of such collaborations will reach beyond the individuals involved, but has the potential to make a real difference to an equitable distribution of health and health care worldwide.

Medical students regardless of country of origin continue to look for global health opportunities. Traditional global elective rotations that are not supported by a robust curriculum and assessment have potential for harm to all involved. Robust partnerships between teaching institutions allow for safe, pedagogically sound, and culturally sensitive rotations. In the current climate of nationalism, promoting student exchange among young, bright, compassionate medical students with a natural calling to serve can hopefully lead to more cultural understanding and improved health care throughout the world.

References

1. 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.
2. Association of American Medical Colleges. Medical School Graduation Questionnaire: 2017 All Schools Summary Report. 2017 July 2017.
3. Law IR, Worley PS, Langham FJ. International medical electives undertaken by Australian medical students: current trends and future directions. *Med J Aust.* 2013;198(6):324-6.
4. Panosian C, Coates TJ. The new medical “missionaries”—grooming the next generation of global health workers. *N Engl J Med.* 2006;354(17):1771-3.
5. Fox GJ, Thompson JE, Bourke VC, Moloney G. Medical students, medical schools and international health. *Med J Aust.* 2007;187(9):536-9.
6. Towards International Medical Equality (TIME) [cited 2018 10 March]. Available from: <http://www.timeuq.org/>.
7. Australian Medical Students' Association [cited 2018 10 March]. Available from: <https://www.amsa.org.au/amsa-global-health-conference-ghc-2017>.
8. Students for global health [cited 2018 10 March]. Available from: <https://studentsforglobalhealth.org/>.
9. American Medical Student Association. International Health Opportunities Directory [cited 2018 10 March]. Available from: <https://amsaiho.org/about/>.
10. UNHCR. Global Report 2016. Geneva: UNHCR.
11. Koplan JP, Bond TC, Merson MH, Reddy KS, Rodriguez MH, Sewankambo NK, et al. Towards a common definition of global health. *Lancet.* 2009;373(9679):1993-5.
12. 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.* 2003;78(3):342-7.
13. Chao FY. International medical electives: time for a rethink? *Australian medical Student Journal.* 2014.
14. van Doorslaer E, Masseria C, Koolman X, OECD Health Equity Research Group. Inequalities in access to medical care by income in developed countries. *CMAJ.* 2006;174(2):177-83.
15. Edwards R, Piachaud J, Rowson M, Miranda J. Understanding global health issues: are international medical electives the answer? *Med Educ.* 2004;38(7):688-90.
16. Shah S, Wu T. The medical student global health experience: professionalism and ethical implications. *J Med Ethics.* 2008;34(5):375-8.

17. Crump JA, Sugarman J, Working Group on Ethics Guidelines for Global Health T. Ethics and best practice guidelines for training experiences in global health. *Am J Trop Med Hyg.* 2010;83(6):1178-82.
18. International Federation of Medical Students' Associations (IFMSA). IFMSA Policy Statement: Ethical Medical Placements Abroad. Hammamet, Tunisia; 2014, 6 March.
19. Gupta A, Lamb MC, Sisney J, Taylor C, Ziethen T, Laborde Y. Medicine in Society Health Project: Five Students' Journey to a Resource-Limited Clinic in the Haitian Countryside. *Ochsner J.* 2017;17(3):254-60.
20. Vinroot RA, Jr., Seoane L. Think locally, act globally. *Ochsner J.* 2012;12(4):308-9.
21. Rowson M, Smith A, Hughes R, Johnson O, Maini A, Martin S, et al. The evolution of global health teaching in undergraduate medical curricula. *Global Health.* 2012;8:35.
22. Kasper J, Greene JA, Farmer PE, Jones DS. All Health Is Global Health, All Medicine Is Social Medicine: Integrating the Social Sciences Into the Preclinical Curriculum. *Acad Med.* 2016;91(5):628-32.
23. Pati S, Sinha R, Panda M, Pati S, Sharma A, Zodpey S. Global Health Teaching in India: A Curricular Landscape. *Front Public Health.* 2017;5:259.
24. Battat R, Seidman G, Chadi N, Chanda MY, Nehme J, Hulme J, et al. Global health competencies and approaches in medical education: a literature review. *BMC Med Educ.* 2010;10:94.
25. Adams LV, Wagner CM, Nutt CT, Binagwaho A. The future of global health education: training for equity in global health. *BMC Med Educ.* 2016;16(1):296.