

The Ethics of Medical Volunteerism



Geren S. Stone, MD, DTM&H*, Kristian R. Olson, MD, MPH, DTM&H

KEYWORDS

• Medical volunteerism • Medical mission • Ethics

KEY POINTS

- Thousands of health care providers volunteer annually for short-term medical service trips.
- These trips have the potential to both benefit and harm those involved.
- The context, resource and time limitations, and the language and cultural barriers present ethical challenges to volunteers.
- Based on published guidelines and program descriptions, we propose some guiding principles that can inform and equip those engaging in medical volunteerism including mission, partnership, preparation, reflection, support, sustainability, and evaluation.

BACKGROUND

In April 2014, the NY Times Opinion Pages hosted a debate titled “Can ‘Voluntourism’ make a difference?”¹ In response to the growing trend of travelers from high-income countries opting to volunteer in low resource settings, the investigators in this series of opinion pieces set forth their answers to the question based on their experience and expertise on the ethics and impact of short-term volunteers. Similarly, National Public Radio labeled “voluntourism” as “one of the fastest growing trends in travel today” with “more than 1.6 million volunteer tourists...spending about \$2 billion each year” and asked the question “who’s it helping most.”² The NY Times and National Public Radio pieces portrayed growing tensions with this type of short-term service and detailed a mixture of opinions and perspectives on the benefits both for those serving and those being served.

Medical providers have a long history of volunteerism and service to those most in need. Short-term medical service trips (MSTs) have continued to grow in the recent

Disclosure: The authors have nothing to disclose.

Department of Medicine, MGH Center for Global Health, Massachusetts General Hospital, 55 Fruit Street, Boston, MA 02114, USA

* Corresponding author. Massachusetts General Hospital, MGH Global Health, Suite 722, 125 Nashua Street, Boston, MA 02114.

E-mail address: gstone@partners.org

Med Clin N Am 100 (2016) 237–246

<http://dx.doi.org/10.1016/j.mcna.2015.09.001>

[medical.theclinics.com](http://www.medical.theclinics.com)

0025-7125/16/\$ – see front matter © 2016 Elsevier Inc. All rights reserved.

past. Although no central monitoring body exists, researchers have found more than 500 organizations offering MSTs with a “very conservative estimate” of annual expenditures at \$250 million.³ These service trips last anywhere from days to months and are offered both by faith-based and non-faith-based organizations. They may be in response to disasters such as the recent earthquake in Nepal or the Ebola epidemic in West Africa, or focused on nonemergent health care in chronically underresourced areas. MSTs are especially common among students. In 2014, the Association of American Medical Colleges reported that 36% of matriculating medical students had participated in an international volunteer experience before medical school, and 29% of graduating medical students had participated in a global health rotation or volunteer experience during medical school.^{4,5} These types of experiences are growing among all health professions and at all levels of training.

Although motivations for participating in MSTs vary by the individual, the underlying foundation is often a response to the health disparities and inequitable access to resources that exist globally. For instance, sub-Saharan Africa is estimated to have 24% of the global disease burden but only 2% of the global physician supply.⁶ MSTs offer a means of response and opportunity to “do something.” Therefore, investigators have written, “it is difficult to imagine a pursuit more closely aligned with the professional values and visceral instincts of most physicians.”⁷ Research has also described the benefits of such experiences for trainees, including a broadened medical knowledge, improved physical examination and procedural skills, enhanced sensitivity to cost issues, and a greater appreciation for cross-cultural communication.^{8–20} Participants have demonstrated an increased likelihood to enter general primary care, obtain public health degrees, and engage in community service.^{8,9,15}

Yet, in the midst of this growth of MSTs, there has been an increasing realization of the risks and challenges these experiences present. For participants, the risks can be to be their own personal health. In 1 study, 4% of participants in a medical program in Kenya experienced tuberculin skin test conversion after the experience.²¹ Cultural differences may make communication and understanding difficult with respect to expectations, values, and decision making. Resources including equipment, personnel, and infrastructure are likely be limited compared with participants’ usual work environment, requiring them to practice in new and unfamiliar ways, perhaps beyond the scope of their training and expertise, with pathologic conditions they may be unaccustomed to treating. For the host communities, these MSTs may pose safety risks to patients, compete with local services, and use limited local resources such as personnel and infrastructure based on external priorities and with little accountability. In the end, these short-term MSTs, although well intentioned, may actually cause harm leaving participants disenchanted and communities in a worse position than before.

Within this context, there has been an increasing call for dialogue about ethics and impact of short-term MSTs.^{22–47} This article seeks to provide insight into the ethical challenges and offer some general principles from the literature to guide individuals and organizations involved in medical volunteerism.

ETHICAL CHALLENGES IN MEDICAL VOLUNTEER WORK

Context

There are many contextual features about medical volunteer work that can provide ethical challenges to volunteers. By the very nature of the work, volunteers travel to areas that lack resources including equipment, personnel, and infrastructure. This may be a short-term gap in the setting of a natural disaster or may be a longstanding shortage based on sociopolitical factors. Short-term volunteers may question the

impact of MSTs that are only able to address the “symptoms of broader inequalities in health that require more radical solutions at the national and international level.”²⁶ They may feel discouraged if they perceive themselves to only offer a ‘band-aid,’ while the deeper problems continue to exist.

The communities served by these MSTs are inherently vulnerable populations.³⁷ Whether victims of social, economic, or environmental factors, these communities have limited access to health care. Often impoverished, these populations are at risk of exploitation by MSTs, raising ethical concerns about informed consent, beneficence, coercion, autonomy, and justice. Exploitation may take place in various forms and to varying degrees, from the use of unauthorized patient photos for fundraising and publicity to the extreme of practicing new procedural techniques during MSTs.^{39,40} Volunteers in such settings may feel pressure and justification to work beyond the scope of their training and expertise based on the limited resources and the lack of other options for health care available to patients. In addition, patients may have limited understanding of the procedures and treatments including the risks of such plans as well as the qualifications of the health care provider offering the services.

In these settings, medical volunteers may encounter medical conditions that differ from those of their home context. Even when patients have familiar diseases, they often present at more advanced stages and may be complicated by conditions, such as severe malnutrition, for which medical volunteers may have limited experience.^{22,32} Furthermore, the treatment options available to the volunteer may include medications or tools unfamiliar to them.

Limited Time and Resources

MSTs are limited in their duration. Testing and interventions often must be accomplished on a shortened timeline with limited availability for follow-up of outcomes including complications. The resources and equipment are often limited, leading health care providers to make diagnostic and treatment decisions very differently than they do in their usual practice. The overwhelming number of individuals in need may further complicate triage decisions, and the selection of patients to be seen and treated may become problematic. The process of triage may not be viewed by local stakeholders as transparent, equitable, or based on who is most in need of available services. The outcomes of MSTs reported to sponsors and the public are often measured in total numbers of patients seen and treated. This favors a “quantity over quality” approach limiting time with individuals.³² With respect to MSTs providing surgical procedures, the emphasis on volume can overwhelm the health care system’s ability to meet ongoing service needs.^{22,23,32} Without intimate community knowledge or effective health record systems, follow-up care can be greatly compromised.

In addition, although often filling a short-term need, donations and other supplies brought in with MSTs may actually lead to delays in local leadership solving long-term supply problems. In fact, in response to the complexities of donating health care equipment, the World Health Organization has published guidelines as such donations can “even constitute an added burden to the recipient health care system” without proper planning and collaboration.⁴⁸

Cultural and Language Barriers

All the above issues are compounded by cultural and language barriers. These barriers exist in daily domestic practice, but overseas they are often magnified, complicating communication and understanding of values, perceptions, and decision

making. This can manifest as insufficient understanding of disease, including its causes and appropriate treatments.³² Even when sharing a cultural background with a patient, it can be difficult to explain the risks and benefits of certain treatments and to reach a collaborative plan. Yet, communication and understanding are vital to providing patient-centered care, ensuring the patient's engagement in the treatment plan, and promoting the best health outcomes. Differences in culture and language can also complicate relationships between health care providers from different settings. Short-term volunteers may not understand how their decisions and recommendations conflict with the values and plans of local providers. This may lead to tension between host and visitor, and adversely impact the care of patients.

LESSONS FROM INTERNATIONAL RESEARCH

Parallels have been drawn between short-term medical volunteerism and international clinical research including the ethical considerations of each. International research ethics have become established over the last 2 decades. In 1997, a debate on the ethical standards of international research came to the forefront after a placebo-controlled clinical trial that was conducted in developing countries focused on the prevention of mother-to-child HIV transmission. In this case, controversy focused on the use of the placebo-controlled research design despite the existence of a proven efficacious standard of care.^{49,50} Subsequently, in 1999, the Nuffield Council on Bioethics published their guidelines *The Ethics of Clinical Research in Developing Countries*.⁵¹ The Nuffield Council and the Council for International Organizations of Medical Sciences ultimately agreed that patients involved in research should have the same standard of care provided as would be carried out in the research sponsor's country.^{51,52}

In recent years, there have been calls for the application of similar guidelines to medical volunteer experiences.^{26,30,34,53} Investigators have decried the lack of ethical frameworks and oversight for MSTs despite their significant operational similarities to international clinical research. They have even suggested the creation of a formalized ethical review process for MSTs involving the local community and similar to institutional review boards.³⁴

PRINCIPLES FOR MEDICAL VOLUNTEERISM

Meanwhile, the literature on MSTs has been growing with respect to best practices and guidelines. Suchdev and colleagues,⁵⁴ based on their experience developing the Children's Health International Medical Project of Seattle, proposed the guiding principles of mission, collaboration, education, service, teamwork, sustainability, and evaluation. The Working Group on Ethics Guidelines for Training Experiences in Global Health's guidelines, published in 2010, further expanded these principles and best practices for institutions, students, and sponsors involved in such experiences during medical training.³⁰ Other programs and institutions have also published their curricula, guidelines, and organizational principles focused on the ethics of short-term MSTs.^{35,43,55-57} In the realm of humanitarian assistance, the Sphere Project has developed the Core Humanitarian Standard (CHS).^{58,59} CHS outlines a set of 9 commitments for both individuals and organizations to improve the quality and effectiveness of their interventions.⁵⁹ Together these guidelines and principles can be generally organized as mission, partnership, preparation, reflection, support, sustainability, and evaluation.

Mission

For an institution or an individual, a mission involves the purpose and motivation for service. This may be a formal mission statement that communicates a program's aims and values. For an individual, it may be less formal but is certainly no less valuable to consider, especially as each health care worker wants to work with an organization that reflects his or her own personal ethos and values. In general, the mission will encompass addressing global health disparities through service.

For an individual, however, the motivation to serve may also include a focus on personal growth and awareness. That is not to say, as some have written, that medical volunteerism should be seen as an alternative for tourism in order to see exotic places.⁶⁰ Personal growth does (and indeed should) accompany service in such environments. It is the relationships, experiences, and reflections that often leave participants stating, "I gained much more than I gave." Although this statement may sound self-centered and self-serving, it should be judged only in context with the benefits the communities received. During these experiences, the focus and priority should be given to the patients, but the health care providers and the communities can and should both benefit.

Partnership

As one author commented, even passionate, smart, and informed students may "make snap decisions about the best harmonization of complex [ethical and situational] concerns [in global health] without consulting the most important source of information: the people they serve."⁵⁵ Local collaboration and partnership are critical to MSTs. True collaborative partnerships begin with planning of the service, and carries on throughout the experience and beyond. It seeks to empower the local community, valuing their perspective and listening to their needs. As another author writes, part of the value in MSTs is the "expression of mutual caring or solidarity."²⁶ This type of partnership occurs through intentionally planning services that augment and support local priorities and values, rather than undermining or competing with them.

Whereas MSTs are often very brief, a long-term relationship is an important component of effective and sustainable delivery of quality patient care.⁴² A long-term relationship may take different forms depending on each situation. Models may include MSTs with teams returning to the same location multiple times over the course of years or serving through an organization with a long-term staff on-site all year.

Preparation

Appropriate preparation for MSTs includes addressing individual health concerns and basic logistics, including volunteer safety, vaccinations, travel, and malpractice insurance. However, it also requires a basic understanding of local culture, health systems, epidemiology, and sociopolitical considerations.^{30,42} It should focus on the practicalities of service in resource-limited settings and on principles of health equity, universality, and the socioeconomic determinants of health.^{36,43} Preparation equips volunteers with a framework of expectations and tools to process the experiences and challenges. It may include informal discussion, formal didactic curricula, case studies, or simulation.^{46,57,61}

Reflection

There is a growing emphasis on the need for personal reflection in order to process the experiences of MSTs, to maintain humility and openness, and to continue to provide the

highest level of care.^{38,57,61} Space and time for reflection allows room for personal growth as one becomes more aware of one's emotions, assumptions, biases, and values. The Ethics of International Engagement and Service Learning Project promotes a model of "reflective praxis" bringing together action and reflection.⁶¹ For them, reflection "means critically examining one's own views, assumptions, convictions, and actions," and this practice "encourages thoughtful, careful, and evolving engagement."⁶¹ Critical reflection promotes transformation, meaning, and connection in MSTs.

Support

Dialogue, mentorship, and social support are also vital components of short-term MSTs. Among humanitarian workers, burnout, depression, and substance abuse are common, with between 10% and 20% having reported depression, anxiety, or emotional exhaustion.⁶² However, in 1 study, increased social support was associated with lower risk of depression or distress as well as greater life satisfaction.⁶² Social support allows for a "continuous and open discussion" around challenges, stresses, and the benefits of service while also including clear communication protocols, supervision, and space for debriefing.⁴² Mentorship and on-site coaching have been described as indispensable for MSTs.⁵⁵ Nevertheless, these components are frequently missing.⁶³

Sustainability

Volunteers, institutions, and sponsors of MSTs should consider how their work is building beyond the short-term experience.³⁰ This may involve training local providers, building local infrastructure, and maintaining long-term relationships.^{35,54} It must be built on local collaboration and an empowering partnership while being realistic about the limited time and funds characteristic of MSTs.^{56,61}

Evaluation

Lastly, there are increasing calls for improvement in measurement and reporting the outcomes of MSTs. Although the field continues to grow, reports of the services are often anecdotal, narrative, or focused solely on the quantity of services offered.^{41,45} Despite the thousands of trips and millions of dollars spent each year, 1 systematic review found only 6% of the published studies on MSTs over the last 20 years included even low-level evidence and data collection.⁴⁵ Organizations and institutions have a responsibility to those whom they send on MSTs, and the populations they serve, to ensure quality monitoring and evaluation. Sponsors and participants should require routine and ongoing measurements from organizations demonstrating the effectiveness of their MSTs.³⁰

SUMMARY

Those who write and talk about the dream of global health equity can make people think, but can not make them care. It is only through direct involvement with the poor in the developing world (or here at home) that medical students and others in the medical profession at large will find reasons to care and, ultimately, find ways to change the health of the world's most vulnerable.

—Edward O'Neil²⁵

Gustavo Gutiérrez, the father of liberation theology, once advised people to forget the "head trip" of studying the problems of the poor and take a "foot trip" to work among them.²⁵ Medical volunteering offers an opportunity for health care providers to take such a "foot trip." The experiences challenge, encourage, and change

participants. They promote a sense of a “common humanity” and that “their suffering is our suffering.”²⁶ Yet, there is a growing realization that, despite good intentions, these MSTs may fall short of their goals to address the inequities present and may even harm the very communities they are meant to serve. As health care professionals, we bear the social responsibility of our actions to serve the welfare of our patients and first and foremost to “do no harm.”⁶⁴ The contexts, resource and time limitations, and the language and cultural barriers may present various ethical challenges to volunteers, and therefore there have been increasing calls for guidelines, transparency, and open review of MSTs and their outcomes. Parallels have been drawn to international research in developing countries for which guidelines and best practices have been formally developed and implemented over the last 2 decades. While the dialogue continues, principles of mission, partnership, preparation, reflection, support, sustainability, and evaluation can inform and equip those engaging in medical volunteerism. With thoughtfulness and humility, we can and should serve those in need, focused and reliant on collaboration, introspection, and ongoing dialogue to help us navigate this space filled with incredible complexity, challenge, and reward: both for those who serve and those who are served.

REFERENCES

1. NY Times, Can 'voluntourism' make a difference?, in the opinion pages: room for debate. 2014. Available online at: <http://www.nytimes.com/roomfordebate/2014/04/29/can-voluntourism-make-a-difference>.
2. Kahn C. As 'voluntourism' explodes in popularity, who's it helping most? In goats and soda: stories of life in a changing world. Washington, DC: National Public Radio; 2014.
3. Maki J, Qualls M, White B, et al. Health impact assessment and short-term medical missions: a methods study to evaluate quality of care. *BMC Health Serv Res* 2008;8:121.
4. Association of American Medical Colleges (AAMC). Matriculating student questionnaire: 2014 all schools summary report. Washington, DC: Association of American Medical Colleges; 2014.
5. Association of American Medical Colleges (AAMC). Medical school graduation questionnaire: 2014 all schools summary report. Washington, DC: Association of American Medical Colleges; 2014.
6. Scheffler RM, Liu JX, Kinfu Y, et al. Forecasting the global shortage of physicians: an economic- and needs-based approach. *Bull World Health Organ* 2008;86(7): 516–523B.
7. Shaywitz DA, Ausiello DA. Global health: a chance for Western physicians to give-and receive. *Am J Med* 2002;113(4):354–7.
8. Miller WC, Corey GR, Lallinger GJ, et al. International health and internal medicine residency training: the Duke University experience. *Am J Med* 1995;99(3):291–7.
9. Gupta AR, Wells CK, Horwitz RI, et al. The international health program: the fifteen-year experience with Yale University's Internal Medicine Residency Program. *Am J Trop Med Hyg* 1999;61(6):1019–23.
10. Haq C, Rothenberg D, Gjerde C, et al. New world views: preparing physicians in training for global health work. *Fam Med* 2000;32(8):566–72.
11. Haskell A, Rovinsky D, Brown HK, et al. The University of California at San Francisco international orthopaedic elective. *Clin Orthop Relat Res* 2002;(396):12–8.

12. Thompson MJ, Huntington MK, Hunt DD, et al. 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. Godkin M, Savageau J. The effect of medical students' international experiences on attitudes toward serving underserved multicultural populations. *Fam Med* 2003;35(4):273–8.
14. Mutchnick IS, Moyer CA, Stern DT. Expanding the boundaries of medical education: evidence for cross-cultural exchanges. *Acad Med* 2003;78(10 Suppl):S1–5.
15. Ramsey AH, Haq C, Gjerde CL, et al. Career influence of an international health experience during medical school. *Fam Med* 2004;36(6):412–6.
16. Federico SG, Zachar PA, Oravec CM, et al. A successful international child health elective: the University of Colorado Department of Pediatrics' experience. *Arch Pediatr Adolesc Med* 2006;160(2):191–6.
17. Disston AR, Martinez-Diaz GJ, Raju S, et al. The international orthopaedic health elective at the University of California at San Francisco: the eight-year experience. *J Bone Joint Surg Am* 2009;91(12):2999–3004.
18. Sawatsky AP, Rosenman DJ, Merry SP, et al. Eight years of the Mayo International Health Program: what an international elective adds to resident education. *Mayo Clin Proc* 2010;85(8):734–41.
19. Petrosniak A, McCarthy A, Varpio L. International health electives: thematic results of student and professional interviews. *Med Educ* 2010;44(7):683–9.
20. Campbell A, Sherman R, Magee WP. The role of humanitarian missions in modern surgical training. *Plast Reconstr Surg* 2010;126(1):295–302.
21. Gardner A, Cohen T, Carter EJ. Tuberculosis among participants in an academic global health medical exchange program. *J Gen Intern Med* 2011;26(8):841–5.
22. Dupuis CC. Humanitarian missions in the third world: a polite dissent. *Plast Reconstr Surg* 2004;113(1):433–5.
23. Wolfberg AJ. Volunteering overseas—lessons from surgical brigades. *N Engl J Med* 2006;354(5):443–5.
24. White MT, Cauley KL. A caution against medical student tourism. *Virtual Mentor* 2006;8(12):851–4.
25. O'Neil E Jr. The “ethical imperative” of global health service. *Virtual Mentor* 2006;8(12):846–50.
26. DeCamp M. Scrutinizing global short-term medical outreach. *Hastings Cent Rep* 2007;37(6):21–3.
27. Anderson FW, Wansom T. Beyond medical tourism: authentic engagement in global health. *Virtual Mentor* 2009;11(7):506–10.
28. Green T, Green H, Scandlyn J, et al. Perceptions of short-term medical volunteer work: a qualitative study in Guatemala. *Global Health* 2009;5:4.
29. Chapin E, Doocy S. International short-term medical service trips: guidelines from the literature and perspectives from the field. *World Health Popul* 2010;12(2):43–53.
30. Crump JA, Sugarman J, Working Group T. on Ethics Guidelines for Global Health, Ethics and best practice guidelines for training experiences in global health. *Am J Trop Med Hyg* 2010;83(6):1178–82.
31. Jesus JE. Ethical challenges and considerations of short-term international medical initiatives: an excursion to Ghana as a case study. *Ann Emerg Med* 2010;55(1):17–22.
32. Wall A. The context of ethical problems in medical volunteer work. *HEC Forum* 2011;23(2):79–90.

33. Langowski MK, Ittiss AS. Global health needs and the short-term medical volunteer: ethical considerations. *HEC Forum* 2011;23(2):71–8.
34. DeCamp M. Ethical review of global short-term medical volunteerism. *HEC Forum* 2011;23(2):91–103.
35. Ott BB, Olson RM. Ethical issues of medical missions: the clinicians' view. *HEC Forum* 2011;23(2):105–13.
36. Snyder J, Dharamsi S, Crooks VA. Fly-By medical care: conceptualizing the global and local social responsibilities of medical tourists and physician voluntourists. *Global Health* 2011;7:6.
37. Wall LL. Ethical concerns regarding operations by volunteer surgeons on vulnerable patient groups: the case of women with obstetric fistulas. *HEC Forum* 2011; 23(2):115–27.
38. Abedini NC, Gruppen LD, Kolars JC, et al. Understanding the effects of short-term international service-learning trips on medical students. *Acad Med* 2012; 87(6):820–8.
39. Holt GR. Ethical conduct of humanitarian medical missions: I. informed consent. *Arch Facial Plast Surg* 2012;14(3):215–7.
40. Holt GR. Ethical conduct of humanitarian medical missions: II. use of photographic images. *Arch Facial Plast Surg* 2012;14(4):295–6.
41. Martiniuk AL, Manouchehrian M, Negin JA, et al. Brain gains: a literature review of medical missions to low and middle-income countries. *BMC Health Serv Res* 2012;12:134.
42. Asgary R, Junck E. New trends of short-term humanitarian medical volunteerism: professional and ethical considerations. *J Med Ethics* 2013;39(10): 625–31.
43. Saffran L. Dancing through cape coast: ethical and practical considerations for health-related service-learning programs. *Acad Med* 2013;88(9):1212–4.
44. Seymour B, Benzian H, Kalenderian E. Voluntourism and global health: preparing dental students for responsible engagement in international programs. *J Dent Educ* 2013;77(10):1252–7.
45. Sykes KJ. Short-term medical service trips: a systematic review of the evidence. *Am J Public Health* 2014;104(7):e38–48.
46. Logar T, Le P, Harrison JD, et al. Teaching corner: “first do no harm”: teaching global health ethics to medical trainees through experiential learning. *J Bioeth Inq* 2015;12(1):69–78.
47. Kittle N, McCarthy V. Teaching corner: raising the bar: ethical considerations of medical student preparation for short-term immersion experiences. *J Bioeth Inq* 2015;12(1):79–84.
48. World Health Organization. Guidelines for Health Care Equipment Donations. Geneva (Switzerland): World Health Organization; 2000.
49. Angell M. The ethics of clinical research in the third world. *N Engl J Med* 1997; 337(12):847–9.
50. Lurie P, Wolfe SM. Unethical trials of interventions to reduce perinatal transmission of the human immunodeficiency virus in developing countries. *N Engl J Med* 1997;337(12):853–6.
51. Nuffield Council on Bioethics. The ethics of clinical research in developing countries. London: Nuffield Council on Bioethics; 1999.
52. Council for International Organizations of Medical Sciences. International ethical guidelines for biomedical research involving human subjects. Geneva (Switzerland): Council for International Organizations of Medical Sciences (CIOMS); 2002.

53. Shah S, Wu T. The medical student global health experience: professionalism and ethical implications. *J Med Ethics* 2008;34(5):375–8.
54. Suchdev P, Ahrens K, Click E, et al. A model for sustainable short-term international medical trips. *Ambul Pediatr* 2007;7(4):317–20.
55. Lahey T. Perspective: a proposed medical school curriculum to help students recognize and resolve ethical issues of global health outreach work. *Acad Med* 2012;87(2):210–5.
56. Heck JE, Bazemore A, Diller P. The shoulder to shoulder model-channeling medical volunteerism toward sustainable health change. *Fam Med* 2007;39(9):644–50.
57. Sheather J, Shah T. Ethical dilemmas in medical humanitarian practice: cases for reflection from Medecins Sans Frontieres. *J Med Ethics* 2011;37(3):162–5.
58. The Sphere Project. The Sphere Project: humanitarian charter and minimum standards in humanitarian response. 3rd edition. Hampshire (United Kingdom): Hobbs the Printers; 2011.
59. The Sphere Project, The core humanitarian standards and the sphere core standards- analysis and comparison. Version 2 edition. Geneva (Switzerland): The Sphere Project; 2015.
60. Godfrey J, Wearing S, Schlenker N. Medical volunteer tourism as an alternative to backpacking in Peru. *Tourism Planning and Development* 2015;12(1):111–22.
61. The Ethics of International Engagement and Service Learning Project. Global praxis: exploring the ethics of engagement abroad. Vancouver (BC): The Ethics of International Engagement and Service-Learning Project; 2011.
62. Lopes Cardozo B, Gotway Crawford C, Eriksson C, et al. Psychological distress, depression, anxiety, and burnout among international humanitarian aid workers: a longitudinal study. *PLoS One* 2012;7(9):e44948.
63. Crump JA, Sugarman J. Guidelines for global health training. *Health Aff* 2011;30(6):1215.
64. Smith CM. Origin and uses of *primum non nocere*—above all, do no harm! *J Clin Pharmacol* 2005;45(4):371–7.