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## **Ethics of Global Health “Immersion” in Health Professions Education**

### **From the Editor**

**Ethical Issues in Global Health Education and “Immersion” Experiences** 711  
Gillian Naro

### **Case and Commentary**

**Who Is Served Best by Health Professions Service Learning Trips?** 715  
Jennifer Jacobs, MD, MPH and Gillian Naro

**How Should Mission Trips Be Administered?** 722  
Kristin K. Sznajder, PhD, MPH, Michael C. Chen, MD, and  
Dana Naughton, PhD, MSW

**How Should We Decide Whether and When Some Care Is Better Than No Care?** 729  
Rachel Koch, MD, John G. Meara, MD, DMD, MBA, and  
Anji E. Wall, MD, PhD

**What Are Criteria for Considering Technologies’ Uses and Influences in LMICs’ Health Care Infrastructures?** 735  
Rolvix Patterson and Richard Rohrer, MD

### **Medical Education**

**How the Social Contract Can Frame International Electives** 742  
Shailendra Prasad, MBBS, MPH, Fatima Alwan, MS, Jessica Evert, MD,  
Tricia Todd, MPH, and Fred Lenhoff, MA

**Facilitating Critical Self-Exploration by Global Health Students** 749  
William B. Ventres, MD, MA

**What Does a Mutually Beneficial Global Health Partnership in Family Medicine Residency Look Like?** 759  
Elizabeth Hutchinson, MD, Vanessa Kerry, MD, MSc, and  
Sadath Sayeed, MD, JD

**Which LCME Accreditation Expectations Support Quality and Safety in Global Health Immersion Experiences for Medical Students?** 766  
Robert Hash, MD, MBA and Barbara Barzansky, PhD, MHPE

**How Should Schools Respond to Learners' Demands for Global Health Training?** 772  
Claudia O. Gambrah-Sampaney, MD, Jesse E. Passman, MD, MPH, Andrielle Yost, MPA, and Glen N. Gaulton, PhD

**How Should Academic Medical Centers Administer Students' "Domestic Global Health" Experiences?** 778  
Sural Shah, MD, MPH

### **Policy Forum**

**How Should Public Health Schools Help Meet Millennium Development Goals in Latin America?** 788  
Taryn Clark, MD, Julia Terle, MD, and Robert H. Gilman, MD

### **Medicine and Society**

**Is Updating the WMA Physician's Pledge Enough?** 796  
Ben Bowman and Brian Callender, MD

**Are Patients' and Communities' Poverty Exploited to Give Health Professions Students Learning Experiences?** 801  
Harold W. Baillie, PhD and John F. McGeehan, MD

### **History of Medicine**

**Volunteer Service From American Physicians During the Vietnam War** 806  
Kelsey Walsh, MA

### **Art of Medicine**

**Anatomy of a Medical Student** 813  
Fatimah Hafeez Choudhary

### **Personal Narrative**

**Voluntourism** 815  
Hannah R. Sullivan

### **Podcast**

**How Can Global Health Outreach Programs Be Both Sustainable and Educational? An Interview with John Straw and Cat Quinn**

## FROM THE EDITOR

### Ethical Issues in Global Health Education and “Immersion” Experiences

Gillian Naro

Global health programs provoke a great deal of institutional interest among health professions students. More than 25% of surveyed students report having participated in a global health experience during medical school.<sup>1</sup> Students drawn to these experiences often incorporate inclusive practices in their future work, which enhances their cultural sensitivity and clinical skills.<sup>2,3,4</sup> Initially, learners tend to take part in these experiences to understand challenges of global health care and gain exposure to advanced or rare pathologies while developing and ultimately practicing clinical skills in serving many with limited access to health care.<sup>5</sup> These trips can help students and patients, but some students return questioning the quality of the care they helped administer and the sustainability of the programs in which they participated. Mismanaged trips can lead to student distress, resource depletion, and inadequate care. Academic institutions and international nonprofit organizations should consider the value of these trips to communities they seek to serve as they continue to promote students' learning. This theme issue of the *AMA Journal of Ethics* aims to reflect on the ethics of global health immersion experiences. In particular, it addresses ethical questions about standards of care and the impact these trips have on local communities, including patients' access to care and technology and whether and when some care is better than no care.

Several contributors consider who is best served by these trips. Jennifer Jacobs and I respond to a case of a student who doubts the value of the care her program provides to local patients and has conflicting emotions about her participation. We argue that global health experiences should prioritize a community's needs, especially for [building capacity](#) of the local health system. Claudia Gambrah-Sampaney, Jesse E. Passman, Andrielle Yost, and Glen N. Gaulton examine how global health initiatives can be restructured to meet students' and [participating institutions' needs](#). Hannah R. Sullivan also shares her personal experience fostering cultural and academic exchange as an administrative maternal health program [volunteer in Kenya](#).

When we zoom out from students', clinicians', and patients' experiences to consider roles and goals of institutions that design these trips, standards of global aid distribution should be considered. Taryn Clark, Julia Terle, and Robert H. Gilman discuss how a Johns Hopkins University-directed program implements low-cost, high-impact training in Peru and Bolivia to help these countries meet [Millennium Sustainable Development Goals](#). Ben Bowman and Brian Callender examine the World Medical Association's updated

[Physician's Pledge](#), paying special attention to health professions students' obligations to proactively support domestic and international human rights and civil liberties.

International partnerships among host institutions and US-based academic institutions can inject health service delivery and research resources into local communities. However, gaps between expectations and reality can emerge when some host countries find that costs of hosting students exceed estimates.<sup>6</sup> Kristin K. Sznajder, Michael C. Chen, and Dana Naughton consider how to respond to [one-sided partnerships](#). Elizabeth Hutchinson, Vanessa Kerry, and Sadath Sayeed discuss a [bidirectional partnership](#) between the nonprofit Seed Global Health and the WWAMI-University of Malawi/College of Medicine to illustrate prioritization of fundamental ethical principles in the pursuit of global health aims. Kelsey Walsh discusses physicians' participation in the American Medical Association's [Volunteer Physicians for Vietnam Program](#) (1966-1973).

Patients who depend on free clinics for access to primary care, domestically and internationally, are particularly vulnerable when clinics are primarily staffed and operated by inexperienced students not yet certified to offer standard of care. Sural Shah examines the [overlap between global and domestic community health](#) in low-resource settings and argues that ethics training can help prepare students for ethical questions arising from suboptimal care, limited resource availability, and systemic inequality. Fatimah Hafeez Choudhary visually represents some students' doubt about how to [express respect](#) for patients' humanity. Harold W. Baillie and John F. McGeehan consider how to [balance stakeholders' interests](#) in providing care to patients who are poor; they argue that to provide just care, students should be trained to deliver care in teams. And Rolvix Patterson and Richard Rohrer provide a framework for [evaluating technologies and devices](#) in underresourced settings in responding to a case in which a global health program's use of mammography might undermine local capacity to provide follow-up care.

As long as people across the globe need health care and either can't afford it or can't access it, ethics and justice questions raised in this issue will persist. Even the best, most well-planned and well-intentioned programs can fail in the face of policy, corruption, or crumbling infrastructure. Many assume that some care is better than no care, but this idea deserves ethical investigation. Rachel Koch, John G. Meara, and Anji E. Wall respond to a case of a boy in a low-income region who receives free [cleft palate surgical interventions](#) offered by a team of international surgeons on a global health trip. The authors argue that surgical mission teams should use norms for medical mission work as benchmarks to determine whether a particular intervention meets ethical standards.

As health professions trainees prepare for global health trips, good program oversight is critical. Shailendra Prasad, Fatima Alwan, Jess Evert, Tricia Todd, and Fred Lenhoff argue that, to preserve the [social contract](#) health professions have with society (at home or

abroad), schools, sponsoring organizations, and governing boards should ensure that global health experiences satisfy social expectations about caregivers' competence and accountability. Robert Hash and Barbara Barzansky examine the Liaison Committee on Medical Education's [accreditation standards](#) regarding risk assessment, supervision, and education in global health settings. Finally, William B. Ventres proposes 6 themes—identity, ideology, ignorance, imagination, intention, and investment—to guide students' [cultivation of self-awareness](#).

International health care will continue to be important in health professions education. Scholars and experts contributing to this issue model ways to grapple with ethical questions raised by these programs.

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## CASE AND COMMENTARY

### Who Is Served Best by Health Professions Service Learning Trips?

Jennifer Jacobs, MD, MPH and Gillian Naro

#### Abstract

Service learning trips can be a powerful means of fostering cultural competency as well as an opportunity for students to expand their clinical skill set. However, if not planned and executed thoughtfully, they might not provide lasting benefit to the communities they seek to serve. Through analysis of a case in which participants question the value of their short-term international service learning trip, we argue that such trips should be designed with the community's needs in mind, preferably as identified by the community. Ideally, both the service group and the community should seek opportunities for teaching and exchange in order to expand the community's ability to provide care to the local population long after the service learning group has left.

#### Case

RM decided to sign up for a spring break service learning trip to a Central American country with a team of 40 dental, medical, nursing, occupational therapy, and pharmacy students and 2 faculty members from each of those disciplines. Inside a local school, they set up a 3-day free clinic. For most members of the community, this clinic is the only one available to them throughout the year where they can receive allopathic care, so the team encountered many acute illnesses and advanced pathologies rarely seen in the United States.

The trip was a success as defined by the trip organizers, and, upon returning, RM reflects on the trip with fellow students, who agree that the opportunity was positive and life changing for them. Some students, however, also shared the same nagging feeling of worry about doing things in an international setting that they would not be allowed to do domestically. RM notes, for example, "We would not have been able to work as independently or perform the same examinations on patients here, and it doesn't quite seem fair to the patients there. We not only are inexperienced and might have missed important things, but we can't follow up with them, either. One often hears, 'Well, some care is better than no care,' but I actually don't find that very satisfying. We get so much out of these experiences and they get student care—a standard of care below what we're taught to deliver here, with no follow-up and no health care infrastructure development. In fact, we benefit from their lack of health care infrastructure; it allows

our school and us a reason to do a service learning trip once a year. It just doesn't feel like a just exchange, and I worry about my complicity in perpetuating it."

### **Commentary**

Shortly after graduating from college, the first author participated in an 8-week volunteer trip abroad with a small nongovernmental organization to gain some real-world experience abroad while also figuring out a future career path. The work involved a variety of activities including, but not limited to, assisting in school classrooms, shadowing and participating in the care of patients in a small community clinic, restocking pharmacy shelves, and helping to examine patients with acute issues at a community outreach clinic. The experience was eye opening, allowing a glimpse of what it meant to practice in a resource-poor setting and how health care disparities impact access to adequate care. It was valuable even for someone who, at the time, had limited skills and understanding of the local cultural and political context and who had nothing concrete to offer the local community other than a bag of donated medical supplies collected prior to the trip. For it was this experience that solidified the first author's decision to attend medical school and ultimately fueled her desire to pursue a career in public health. The trip revealed large gaps in her knowledge and her lack of awareness of the complexities involved in global health work. While the trip was of great personal benefit, it might have had little, if any, beneficial impact on the community.

Multiple studies have identified medical students' growing interest in training in international settings as driving an increase in short-term global health trips and so-called medical missions,<sup>1,2</sup> which have numerous benefits. These trips have potential to broaden the education of medical trainees by increasing their cultural competence and providing them with valuable insight into health inequities, the social determinants of health, and population-based health.<sup>1</sup> Additionally, medical students might see such trips as an opportunity to expand their clinical skill set and diagnostic acumen and increase their exposure to less common medical conditions and disease states.<sup>2</sup> Furthermore, evidence suggests that students who participate in these trips are more likely to pursue primary-care based specialties, express a desire to work with underserved populations, and address health inequities.<sup>2,3</sup>

Although the growing interest in global health has been accompanied by an ever-expanding list of global health resources, guidelines, and literature to help guide students and schools in designing global health curricula, students are still unprepared. Often these trips occur between medical students' first and second years of training (the only available summer break in most curricula). At this time, students are only beginning their medical training and have not yet honed their diagnostic skills or had sufficient exposure to common (or uncommon) disease states. Medical students are enthusiastic about their opportunity to serve vulnerable populations and work in underserved parts of the world;

however, they must be honest about their limitations—be they clinical, cultural, or communication related.<sup>3,4,5</sup>

This essay will explore ethical issues raised by service learning trips, including potential harms to both student volunteers and the communities they serve. We will also discuss how these ethical issues can be addressed by creating formal global health curricula, oversight by medical school accreditation bodies, and reframing service learning trips to focus less on direct clinical care and more on population health, education, and community outreach.

### **Ethical Issues Raised by Service Learning Trips**

A number of articles highlight beneficence, nonmaleficence, and justice as guiding principles for designing global health trips in a thoughtful and ethical manner.<sup>1,5,6</sup> Even in resource-poor settings, the same ethical principles that apply to providing health care in the United States should be applied. If programs are not implemented in a thoughtful manner, they run the risk of exploiting local populations and creating moral distress for medical trainees faced with ethical dilemmas who might not have adequate training for dealing with such situations.<sup>1,4,5</sup>

*Exploitation of the community.* There is a potential power imbalance between volunteers from socioeconomically developed countries and the lower-income communities they serve that could very easily lead to an exploitative relationship.<sup>4,6</sup> This power differential allows inexperienced health care learners more freedom for clinical decision making despite their level of training<sup>2</sup> and can foster a false sense of competence on the part of the learner. Additionally, global health volunteers have the potential to impact the local health care system in which they operate. Reliance on volunteers can undermine the community's faith in local health care professionals due to a misconception that foreign volunteers provide superior care or resources that the community might not otherwise be able to access. Furthermore, it can result in failure of local government to invest in the health system.<sup>3,4,5,7</sup> In a health system in which resources are already strained, local governments might come to rely on foreign volunteers to provide health care for their communities rather than invest in health care resources themselves. While foreign volunteers are seemingly a solution to the problem of scarce resources, failure to invest in sustainable health infrastructure that provides care to a community even in the absence of volunteers can exacerbate health inequities.

*Learners' moral distress.* In the case presented, students felt conflicted about the clinical independence they asserted, the quality of care they provided, and whether their presence was beneficial. Multiple studies have documented **moral distress** on the part of learners who are unprepared for the ethical dilemmas they face in the field as a result of suboptimal global health education, lack of understanding of the local social and political context in which they operate, and failure on the part of schools to provide a formal

educational structure to discuss such challenges.<sup>1,3,5</sup> The student RM in this case notes a “nagging feeling of worry” that the students operated outside their scope. At best operating outside one’s scope leads to suboptimal care of patients; at worst it leads to negative clinical outcomes. The negative feelings of students are worth highlighting, as they can motivate conversations about ethical problems inherent in short-term global health experiences and how to address and even prevent them.

### **Creating a Global Health Curriculum**

Creating a more formalized global health curriculum, of which short-term global health experiences are only one component, can provide students with a framework to support quality care for the local community in an ethical manner.<sup>7</sup> Ideally, training in the social determinants of health, health disparities, cultural sensitivity, health systems, and population health<sup>1,4</sup> would provide medical students with information regarding the social and political context of the community they are traveling to and enable them to participate in discussions about potential ethical dilemmas they might face. Language training would also be beneficial.<sup>1,3,5,6</sup> Furthermore, as part of the formalized global health curriculum, ethical commitments should be structured into global health experiences.<sup>7</sup> Schools need to ensure that students have adequate supervision so that they do not operate beyond their scope and that they have the necessary support when ethical dilemmas arise in the field.<sup>3,4,5,7</sup> Moreover, having clearly delineated roles for and expectations of students, faculty, staff, and members of the local community is crucial to ensuring that service learning trips are executed in a thoughtful and ethical manner.<sup>3,4,5,6,7</sup>

In addition to being part of a standard framework, short-term global health trips should adhere to [standards](#) put forth by medical school accreditation bodies to ensure that they are conducted in an ethical manner. Although the Association of American Medical Colleges provides a number of resources for medical students pursuing electives abroad,<sup>8</sup> there is currently no universal set of guidelines that we know of governing service learning trips.<sup>9</sup> As education about global health and working with underserved populations becomes incorporated into more medical school curricula, it should be evaluated and governed by the same standards that apply to the rest of medical student education.<sup>10</sup>

### **Reframing Service Learning Trips**

These proposed curricular changes, in concert with designing trips with the [needs of the host community](#) in mind, can require medical schools and their students to reframe the way they look at short-term global health experiences. Creating trips that focus more on health education, health systems, and population health would eliminate the problems of moral distress and reduce the exploitation of communities discussed earlier. Shifting the focus away from direct patient care would mitigate the potential harm caused—and moral distress experienced—by students operating beyond their scope or without proper supervision in the clinical setting. It would also reduce, though not fully eliminate,

the risk of an exploitative relationship between foreign volunteers and the communities in which they practice by allowing for a true [2-way exchange](#) between volunteers and communities with the aim of addressing the needs of the local community, as identified by the community. Indeed, stepping back from clinical work would not eliminate all ethical issues, nor would it solve host communities' resource and care shortages. It does, however, have the potential to address a number of problems inherent in short-term clinical work abroad by facilitating development of a skill set that students can apply throughout their careers.

### **Defining and Ensuring a Successful Program**

The case referred to the trip as "a success," begging the question of who defines this success. While the trip might have been a success in the eyes of some volunteers, the "nagging feeling" on the part of RM rightfully suggests that success is in the eye of the beholder and that perhaps the trip might not have been as successful from the view of the community or other participants. This again harks back to the concept that service learning trips are not one-way interactions and success must be defined accordingly. Different players enter global health projects with varying goals and expectations. When reflecting on who is best served by medical trips and global health curricula, it is important to analyze the larger mission of service trips and define success for all stakeholders. Most importantly, a conversation over resources and community needs, as lead by the host community, will paint a clearer picture of what is a true communal success.

A number of steps can be taken to ensure that service trips are successful. Host communities and clinic teams, trip facilitators, medical schools, teachers, learners, and patients ideally can identify shared goals in advance, thus setting the groundwork for a more successful mission<sup>3,4</sup> while serving to balance the power differential between travelers and local communities. Prior to the trip, [promoting students' self-reflection](#) on their intentions and motivations for volunteering can address misaligned or romanticized expectations. Debriefing, ensuring that there is appropriate follow-up after volunteers depart, and incorporating routine evaluation of programs using predefined outcome measures can allow for better assessment of both the student experience and the program's impact on the community.<sup>2,4,5,6</sup> The students' feeling of doubt about the extent of lasting and sustainable change created by their own global health experiences is common and should not be ignored. These feelings of conflict indicate room for growth and can be fruitful as a means of addressing larger health system needs.

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## CASE AND COMMENTARY

### How Should Mission Trips Be Administered?

Kristin K. Sznajder, PhD, MPH, Michael C. Chen, MD, and Dana Naughton, PhD, MSW

#### Abstract

Opportunities to study and practice health-related professions internationally offer transformative benefits for patients, educators, and students. Institutions and educators should model ethical behavior and set examples for global health trainees. Toward this end, it is imperative that universities engaging in international immersion experiences ensure that principles of respect, beneficence, and justice are upheld.

#### Case

A medical school in the United States has recently started advertising what it calls a “global health immersion” program to prospective applicants. The program partners with a free clinic in a South American country and is tremendously popular, often regarded by students as one of the best experiences of their medical school careers and as one of the College of Medicine’s best experiential learning offerings.

Although the program attracts abundant positive attention for the College of Medicine, the partner clinic struggles to meet the health needs of local community members and is always short on supplies. Housing and teaching students from the United States requires resources and efforts by local clinicians and residents. Increasing numbers of students and faculty returning from recent trips have expressed concern not only for patients but also for local clinicians who work with limited resources—electricity and clean water, for example—that are stretched even more thinly by their presence.

The College of Medicine provides small scholarships from donors who subsidize US students’ cost to travel to the partner site. Money from these sources has never been used to compensate local people for their on-site mentorship or administrative support or to contribute to the clinic’s costs of caring for local people. Nor have students from the local clinic population who are interested in medicine ever been invited to participate in any College of Medicine programs in the United States. Students and faculty continue to express concern about the hardships their trips seem to impose on locals at the partner site and about what seems like a lack of reciprocity on the part of the College of Medicine to return the favor by offering comparable educational opportunities to its international

clinic partners. Students and faculty have begun questioning the goals of the “medical mission,” how those goals get defined, and by whom.

### **Commentary**

As our world becomes more interconnected and interdependent, short-term experiences in global health (STEGHs) during educational degree programs are increasing in popularity across health professional fields.<sup>1,2,3</sup> STEGHs are defined as international experiences that are usually short in duration (1-30 days) and incorporate elements such as clinical care, public health education, research, or public health practice.<sup>1</sup> The benefits of STEGHs are well documented in the literature and mainly focus on the positive experiences of students at all levels of clinical and public health education, including medical residents.<sup>4,5</sup> STEGHs not only aim to prepare students for longer-term opportunities abroad, but also strive to prepare them to work with **underserved populations at home**.<sup>2,4</sup> However, attention has also been drawn to student culpability in ethical violations—ranging from cultural insensitivity to potentially life-threatening omissions—during STEGHs.<sup>2</sup> Examples of such unethical behavior include students overstepping their capabilities in practicing medicine abroad and students undermining local professionals.<sup>2,6,7,8</sup>

In contrast to ethical concerns regarding student behavior, the case above illustrates an institutional-level ethical concern. The manner in which the international program was designed and implemented by the College of Medicine resulted in benefits for its students and for its own reputation at the expense of the host community. Although alarming, such failures of ethical global health practice in training programs are likely not all that unusual. Possible reasons for these violations include the lack of awareness or willful neglect of ethical principles in global health, conflicts of interest among individuals and institutions based in both sending and host communities, and a lack of accountability to ensure that ethical principles are upheld.<sup>9</sup> Accordingly, institutions and educators should model ethical behavior for global health trainees and follow ethical guidelines for STEGHs.

### **Goals and Guidelines**

Goals of STEGHs should be determined through a collaborative effort between the sending and host institutions.<sup>3,10</sup> Intentions of all stakeholders—including sending and host institutions, students, faculty, staff, patients, sponsors or donors, and others—need to be examined when setting goals of international educational experiences. Ethical dimensions of the learning experience should also be discussed. The Association of American Medical Colleges,<sup>11</sup> the Working Group on Ethics Guidelines for Global Health Training,<sup>12</sup> and others<sup>1</sup> have published guidelines for community engagement, internships or experiential learning abroad, and electives. These published principles and guidelines call for:

1. Gathering input from partner institutions about directing and implementing projects;
2. Evaluating educational, community, and health outcomes;
3. Motivating sustainability and continuity of programs;
4. Maintaining transparency in how students are prepared for their experiences;
5. Committing to reciprocity and mutual benefit;
6. Nourishing opportunities for program participants to connect and collaborate over time;
7. Confirming that the program does not drain resources from local operations;
8. Maintaining program compliance with local cultural, political, and financial norms.

STEGHs that have a primary objective of exposing students and faculty from high-income areas to challenges faced in low- and middle-income areas should ask how they improve the health of the host population.<sup>13,14</sup> Additionally, STEGHs should be asking: How (and by whom) should ethics and justice questions about offering educational opportunities to relatively well-funded students in underresourced areas be identified, articulated, and addressed?

### **Ethics in Program Development**

It is the duty of all individuals and institutions to uphold ethical principles in STEGHs at the program development stage and throughout the partnership. As discussed above, there are several published guidelines on ethical codes of conduct with respect to STEGHs<sup>1,11,12</sup>; principles that guide biomedical research ethics can also be useful in articulating partnership goals and identifying ethical concerns. The [Belmont Report](#), a governing reference for institutional review boards, was published in 1979 in response to serious ethical lapses.<sup>15,16</sup> The Belmont Report's explicit focus on respect for persons, beneficence, nonmaleficence, and justice can serve as a model for developing ethical guidelines for STEGHs.

*Respect for persons.* STEGH trainees will observe significant disparities in resources that can influence power dynamics in a partnership.<sup>10,17</sup> Partners with fewer resources tend to have diminished autonomy and power. Wealthier institutions have ethical responsibilities to acknowledge and ameliorate these vulnerabilities. Key stakeholders should clearly identify relevant disparities to ensure that open communication can occur and to try to minimize harms from powers imbalances.

*Beneficence.* While sending institutions benefit from learners' opportunities, benefits for host institutions are less often considered.<sup>13</sup> Host institutions can benefit from STEGHs through exchanges that develop more opportunities for host faculty members' professional development, host student engagement, and more support for research and program development opportunities. Ensuring that resource disparities are identified and

ameliorated will allow programs and to maximize mutual benefits and program development opportunities.

*Nonmaleficence.* After identifying resource disparities and agreeing upon how to ameliorate them, collaborating institutions should ensure that students are never put in a position in which they would be expected to work beyond their capabilities,<sup>8</sup> that students understand their limitations and communicate these limitations to the host institution, and that expectations for student conduct are clarified. Furthermore, STEGHs should compensate host faculty equitably for mentoring students from sending institutions, whether through financial or nonfinancial means. Finally, sending institutions should never undermine the authority of local professionals.<sup>13,18,19</sup>

*Justice.* Although every effort should be made to ensure that STEGHs provide equal benefits for the sending and host institution,<sup>18</sup> it is possible that each institution will not have the same experience of the partnership. Thus, it can be helpful for both institutions to agree upon criteria according to which they would deem a partnership equitable. This kind of agreement could take the form of financial reimbursement, curriculum development or implementation, clinical services, or other compensation.

When ethical concerns about a new or continuing partnership arise, they should be articulated to the office that supports the STEGH program and, if necessary, to higher administrators in the university. Without accountability, it is possible that even well-intentioned programs could miss important considerations in educational program development or management. Ethical concerns need to be addressed immediately at each level of program administration, including at the individual level, program level, and institutional level.

### **What Should the College of Medicine Do?**

We propose the following short- and long-term recommendations to ensure that the program in the case above is conducted ethically.

*Short-term.* The College of Medicine should initiate communication with the host institution to identify the STEGH program burdens and benefits for both parties<sup>12,15,18</sup> and then address and resolve any shortcomings in the equitable sharing of those burdens and benefits. Collaborators should also clarify the goals and objectives of the STEGH,<sup>12,15,18</sup> which should be not only mutually beneficial but also compatible. The phrase *medical mission* used by students and faculty at the College of Medicine implies that the program will achieve better health for locals. Both the College of Medicine and the host institution should acknowledge that the college's interest in educating its students (through exposure to the host community) could conflict with health interests of local patients. The College of Medicine should clarify to STEGH students that the purpose of their trip is educational, not clinical-service oriented. Furthermore, the College

of Medicine must ensure student understanding of shared goals in the partnership and dispel commonly held misconceptions, especially the view that people living in poverty benefit from any health care even if it is inadequate.<sup>20</sup> Because STEGHs are collaborative educational initiatives, expectations regarding program goals, student learning objectives, and the limits of students' participation in caregiving must be clearly articulated and agreed upon by program leaders and communicated to all faculty and students at both sending and hosting institutions.

*Long-term.* The College of Medicine should cultivate a culture of knowledge sharing in which both institutions share challenges and solutions, actively pursue [bidirectional exchanges](#), and agree upon mutually desired outcomes when seeking future international partnerships. The College of Medicine should incorporate a process for reviewing whether the STEGH has been or is being implemented ethically. Finally, the institution should advocate for accountability processes for STEGHs at all US-based programs.

### **Conclusion**

The College of Medicine in the case would benefit from STEGHs designed and evaluated in an ethical and collaborative manner. Ensuring that institutions adhere to ethical principles in global health will increase the likelihood of achieving the goals not only for better global health education but also for more sustainable and substantial health care for underserved patients.

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## CASE AND COMMENTARY

### How Should We Decide Whether and When Some Care Is Better Than No Care?

Rachel Koch, MD, John G. Meara, MD, DMD, MBA, and Anji E. Wall, MD, PhD

#### Abstract

This case of cleft lip and palate repair by a surgical mission team is common. Low-risk, single-procedure surgical interventions requiring minimal follow-up with substantial quality of life improvement are well suited for this type of mission. However, cleft repair can also be quite complex and require multiple surgeries and other care over time, postoperative surveillance, and speech therapy. These benefits and burdens prompt us to investigate, from clinical and ethical perspectives, whether and when some surgical care is better than none. We argue that, when performing surgical interventions in low- and middle-income countries, mission teams should consider a systems-based approach that emphasizes collaboration, context, and sustainability.

#### Case

JJ was born with a cleft lip and palate. As a result, he has developed problems with oral competence, feeding, speech, and social acceptance—due to his appearance. He is 4 years old and lives in a rural community in Central Africa. JJ's family heard that a group of surgeons from a university in the United States were coming to a nearby town to offer free cleft lip and palate repairs. JJ and his family and siblings traveled an hour to seek care, and JJ's family waited all day to finally see the surgeon and resident physicians who repaired JJ's cleft.

The resident physicians working on cases like JJ's typically performed several surgeries a day while on location since they feel pressure to do as many as they can; they know that many of the children getting surgery will probably have significantly higher quality of life than those who do not.<sup>1</sup> They also know, however, that patients like JJ will not have access to the same follow-up care as their patients in the United States, who would be followed by a multidisciplinary team of primary care clinicians, audiologists, otolaryngologists, orthodontists, and speech pathologists for the first 2 decades of life until the end of treatment.<sup>2</sup> In addition, they know that many of their patients will be returning to homes with contaminated water and will face higher risk of postsurgical infection. Despite these worries, the resident physicians believe that the potential benefits to the children outweigh the potential risks.

After a few days, JJ and his family traveled home. JJ's surgical sites appeared to be healing well, and the clinic sent the family home with dressings, antibiotics, and care instructions. After JJ's wounds healed over the course of the year, his family noticed that his speech patterns did not seem to be improving and that he continued to have difficulty forming proper sounds and being understood. The visiting surgeons' discharge recommendations included follow-up care with a speech pathologist, but JJ's family was unable to access these services, which could only be found hours from their home. The surgeons also suggested that JJ consider a scar revision surgery after his face had developed more completely—at about age 18—but even if JJ's parents could get him to a city where these services could be accessed, they are unable to afford additional care.

### **Commentary**

Ethical dilemmas occur when stakeholders must choose between mutually exclusive options that each have associated risks and benefits. In this case, the options for the surgical mission team are not to provide cleft lip and palate repair for patients who will be unable to obtain full (ideal) postoperative care or to proceed with the initial surgical treatment after informed consent and give recommendations for future care, knowing that JJ might develop complications leading to morbidity. To address this ethical dilemma, we apply a framework based on the work of one of the authors (A.E.W.),<sup>3,4</sup> which involves identifying stakeholders, establishing medical facts, eliciting the goals and values of the various stakeholders, and identifying benchmark norms in the context of the limitations that are inevitably present, particularly in resource-constrained settings.

### **Analytical Framework**

*Stakeholders.* In this case, there are a number of stakeholders. The primary stakeholders are JJ and his family and the team of high-income country residents and surgeons. JJ's life is directly affected by surgical repair of his cleft, and his family will be financially responsible for nonmedical direct costs and any future care. The visiting team invests time and effort to receive personal gain from the experience of providing surgical care to JJ. The local health care practitioners and the community as a whole are also important stakeholders when considering this case. Members of the local medical community presumably have limited surgical specialty education but will ultimately be responsible for provision of postoperative care. Moreover, the visiting team may utilize significant hospital resources during its visit by monopolizing operating room time, equipment, beds, and staff and by disrupting the hospital's normal daily function. Finally, the community as a whole, which is involved in welcoming such visiting teams, the donor organization—if there is one—and the home institution of the visiting team are stakeholders in this case.

*Medical facts.* Cleft lip repair is a one-time, low-risk surgical procedure and lends itself well to surgical missions.<sup>5</sup> Cleft lip and palate is more complex, as the lip is generally repaired first and the palate at a slightly older age.<sup>6</sup> Early cleft repair before speech

acquisition is preferred; approximately 20% of patients who undergo cleft palate repair require speech and language therapy.<sup>8</sup> Although cleft lip and palate are generally not life-threatening conditions, they do have a real impact on affected children's speech, feeding, and self-esteem and on the social interactions and lifestyle of both affected children and their families.<sup>1,7</sup>

*Goals and values.* It is critical for outside surgical teams to understand the patient's and family's perception of the disease and its possible effects in order to avoid misunderstandings attributable to cultural and language barriers.<sup>9</sup> In order to better understand the family's situation, the goals, values, and priorities of all involved must be defined and points of alignment and divergence identified. In this case, the shared goal of all stakeholders is improved quality of life for JJ and his family. However, the surgical team has additional goals that can conflict with this shared goal. One such goal is meeting donor expectations for the number of cases to be performed. Relatedly, residents want to see and perform as many difficult cases as possible for their educational benefit and personal sense of reward. If there is pressure to produce volume rather than best outcomes, it may lead to suboptimal long-term results for JJ. Similarly, the community may have other goals that conflict with the shared goal of improving JJ's and his family's quality of life. The community might prioritize providing other types of services for its members and might prefer to invest outside resources in other areas if given the chance. However, the allure of a wealthy foreign team also offers prestige and the opportunity to train local health care workers in highly specialized skills. Ideally, the goals and values of the local medical team would have been elicited prior to the visiting team's arrival.

### **Norms for Ensuring Best Outcomes**

Ethical norms for medical mission work can serve as benchmarks to help guide determination of whether a particular intervention meets ethical standards. These norms include adequate preparedness, continuity of care, competence, collaboration, sustainability, and outcomes monitoring.<sup>4</sup>

*Preparedness.* Preparation includes the team knowing the community in which it will be working and the resources available there. What are common cultural ideas and beliefs about cleft lip and palate, and what normally happens to patients with these conditions? What are the options for postoperative care in the local health care system, and how do patients access them? If the team has sufficient [understanding of the conditions](#) in which it will be working, team members can prepare for the challenges they are likely to face, such as limited operating room capacity, different instruments and materials, and different conceptions of disease. If any of the identified barriers are likely to be insurmountable, then teams should consider going somewhere else or working with local hosts to make conditions favorable to the mission prior to arrival.

*Continuity of care.* Building on preparedness, continuity of care is an expectation in high-income countries that a surgeon will be responsible for providing follow-up care or referring to someone who can follow-up with the patient as needed. In contrast, short-term teams depend on local health care workers to provide much of the postoperative care and long-term surveillance.<sup>3</sup> Contextually relevant plans are thus needed for future follow-up and management.

*Competence.* Competence is particularly important when surgical trainees will be operating in a country whose regulations on health care practitioners may be less stringent than in the trainees' home country. Trainees must have adequate supervision from the senior surgeons on the team and communicate their level of training and experience to patients, families, and local clinicians. Although cases that they see abroad might pose interesting and novel challenges, clinicians at all levels of training and experience should not routinely work outside their scope of practice. Patients are likely unaware of licensure regulations or the credentials of visiting team members and therefore cannot reasonably be expected to refuse care that might compromise their safety.

*Collaboration.* Collaboration with local clinicians ought to be a primary focus of specialized teams like the one in this case. The team must work to **build trust** with the local clinicians and community and recognize that it is working within an existing system so as not to undermine local physicians or erode local facilities such that they cannot continue to provide routine and essential surgical care. Additionally, the team should select patients based on recommendations from local clinicians, who likely have insight into patients' situations that the outside team lacks.

*Sustainability.* In a related fashion, investment in sustainable interventions requires building local capacity to treat patients so that ultimately visiting teams will no longer be needed. The team would do greater long-term good if it spent a portion of its time training local physicians to assess and care for patients with cleft lip and palate with the aim of eventually replacing medical mission teams with local experts. While it is not realistic to train local surgeons to perform cleft repairs in such a short time, repeated visits or **sponsoring select trainees** to undergo further training are ways of investing in a sustainable health system. Perhaps the team could also solicit funding to bring a speech therapist to train someone locally to provide speech therapy.

*Monitoring outcomes.* Finally, the team ought to consider how to track the outcomes of the surgical cases it performs in order to assess its long-term impact. In the event long-term outcomes are less than desirable, the team could either stop providing care or find ways to ameliorate the outcomes, thereby avoiding a waste of resources. In the event that local capacity is inadequate to accomplish the goal of tracking outcomes, the visiting team could provide a system for doing so and train local health care workers to keep records and follow-up with patients postdischarge. The team's broader resource

investment would help ensure the best quality care and outcomes for patients it seeks to help.

### **Optimal Care for Context**

This case demonstrates some of the many limitations present in resource-constrained settings. Time is a limiting factor for surgeons who do short-term missions, as they will, by definition, leave. Many cannot spend longer in a country building infrastructure or training local health care practitioners. In this case, the visiting team has a specialized treatment to offer that is not otherwise available to the community and has the potential to enhance JJ's quality of life and ability to succeed. However, a one-time service is inadequate to fully treat his cleft lip and palate.

The optimal intervention, though still not perfect in the grand scheme of health equity, would be for this team to invest both in the cleft repair now and in health system strengthening through training local physicians and ancillary staff to provide surgical repair and postoperative therapy after the team leaves. In this way, some patients might receive less than the ideal standard of care in the short-term, but the investment of time and resources would provide benefit in the future by building a health system capable of eventually providing the full spectrum of cleft care.

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## CASE AND COMMENTARY

### What Are Criteria for Considering Technologies' Uses and Influences in LMICs' Health Care Infrastructures?

Rolvix Patterson and Richard Rohrer, MD

#### Abstract

A lack of health technology is an obstacle to health system growth in low- and middle-income countries (LMICs). US-based clinicians participating in global health efforts might sometimes wonder about clinical and ethical standards by which they should judge short- and long-term risks and benefits of bringing technological assistance with them to care for patients in LMICs. These countries are heterogeneous and changing, so establishing an evidence base for clinical and ethical decision making about technology use could be an important priority. This article suggests clinically and ethically relevant criteria according to which health technologies' use and influence can be evaluated.

#### Case

A United States school has a relationship with a nongovernmental organization (NGO) in a Latin American country to which faculty and fourth-year students travel for a month-long elective in global health.

The Ministry of Health (MoH) in this country has identified maternal mortality as an important problem in the remote region hosting the global health program. Government prenatal protocols call for all pregnant women to undergo 2 ultrasound examinations over the course of their pregnancy. However, there is only one ultrasound machine for the entire region. It is located at a government hospital that is difficult for many women to reach and is often nonfunctional for months at a time. Practically speaking, only a small percentage of pregnant women have any ultrasound screening at all.

Faculty at the school obtain a portable ultrasound machine via a loan from a manufacturer and bring it to the remote clinic. The word spreads, and pregnant women from the surrounding area come to the clinic for their ultrasounds. The students gain expertise with basic transabdominal prenatal ultrasounds, and they are enthusiastic about the experience. It dawns on the students, however, that the well-intentioned provision of ultrasound exams could undermine demand by the community for local, year-round ultrasound capacity at the government hospital. They worry that they could be impeding progress. How should they address this concern?

## Commentary

To practitioners from high-income countries (HICs) visiting regions with limited health care resources in low- and middle-income countries (LMICs), the dearth of health care technologies can be even more striking than the variety of exotic local diseases. Many health outcomes are directly dependent on access to health care technologies, and yet barriers to accessing these technologies are numerous and substantial in LMICs. For students and other volunteers, this can result in either an insight-provoking medical experience or a frustrating exercise in delivering care that seems to fall short of what patients deserve.

NGOs and their visiting health care teams have an opportunity to improve health outcomes by providing access to health care technologies. They might work to reinforce existing local health care efforts, bring in specialists not available in-country, or serve as advisors. However, good faith attempts to introduce health care technologies sometimes result in disappointment or waste. It has been suggested that only a fraction of [donated clinical equipment](#) is used as planned.<sup>1</sup> As suggested in the case, some uses can have negative consequences that warrant ethical attention. Socioeconomic, political, and health system factors all play roles in the success or failure of these interventions. One purpose of this commentary is to examine the roles of health technology interventions in LMIC health systems and provide criteria NGOs and practitioners can use to evaluate prospective risks and benefits of devices being considered for use in health care service delivery.

## NGOs and Technology

As the primary government health care agency in the case, the MoH is tasked with overseeing the appropriateness of public health evaluation, supply chains, interventions, and clinical guidelines used in local settings. NGOs bring external resources in the form of personnel, knowledge, and equipment that can augment local health care service delivery capacity. Such initiatives require [public-private partnerships](#) that operate transparently and accountably.<sup>2</sup> NGOs tend to employ resources unilaterally outside health care delivery frameworks established by the MoH, however, which runs the risk of duplicating programs or wasting scarce resources on efforts that may be at cross-purposes with those of the MoH. NGOs thus should play a subsidiary role to MoHs, which derive their authority to define and assign priorities for a national health plan from the nation's sovereignty. It is important to recognize that LMIC MoHs might have few resources to deploy for executing their mandates and could lack administrative mechanisms to oversee NGOs, which should initiate and facilitate communication with MoHs.<sup>2</sup>

## Technology Assessment

This article's focus is on devices as a subset of health technology. Medical devices are defined by the World Health Organization (WHO) as a division of health technology excluding products such as medicines and vaccines that rely solely on immunologic or metabolic mechanisms.<sup>3</sup> Devices include a range of technologies, from simple blood pressure monitors to more complex ultrasound and computerized tomography machines. The WHO supports health technology assessment (HTA) of the efficacy and appropriateness of interventions.<sup>4</sup> HTA is described as "a multidisciplinary process that summarizes information about the medical, social, economic and ethical issues related to the use of a health technology in a systematic, transparent, unbiased, robust manner."<sup>5</sup> As delineated by the WHO, HTA consists of 3 layers of questions "for the coherent introduction of technologies, especially medical devices, into health systems."<sup>6</sup> These layers relate to the effectiveness, appropriateness, and implementation of devices. HTAs can be useful in policy creation and decision making about devices. However, formal HTA requires comparative-effectiveness and cost-effectiveness data that can be limited or hard to gather in LMIC settings. Coupled with disparate socioeconomic, cultural, and political settings across LMICs, limited data compromise the execution and applicability of HTAs.

While originally created to direct health technology policy development, the domains in the Table below (based on the WHO's HTA domains) can inform ethical review of any potential NGO device and can be used as a checklist for assessing technologies. Simple, cheap, and effective devices like thermometers and blood pressure cuffs scarcely need evaluation. Likewise, point-of-service tests like hemoglobinometers, glucometers, and urine pregnancy tests are almost always appropriate. However, laboratory tests for malaria, hepatitis, HIV, and cervical cancer require more consideration, as capacity to follow up with patients who have positive findings can often be compromised. Surgical instrumentation and supplies, ultrasound machines, and more advanced radiology equipment require thorough, critical consideration.<sup>7</sup>

Table. Health Technology Reflection Guide <sup>a</sup>	
Domains	Questions
Effectiveness	<ol style="list-style-type: none"><li>1. Is this intervention effective for the specific problem regardless of the country and health care setting?</li><li>2. Are there other technologies that could address this problem as effectively?</li><li>3. What are predicted costs of purchasing, implementing, and maintaining this device?</li><li>4. Who will bear costs of this intervention?</li><li>5. Are costs worth expected benefits to the patients, local clinicians, and the nongovernmental organization?</li></ol>

Appropriateness	<ol style="list-style-type: none"> <li>1. Does this device respond to needs that have been explicitly stated by patients and local clinicians?</li> <li>2. Does this intervention support existing health system goals as described by national, regional, and local health plans?</li> <li>3. Will this device be delivered with any required ancillary materials?</li> <li>4. How are device donations regulated by local institutional and national guidelines?</li> <li>5. How do local clinicians expect this intervention to influence service provision in their facility and region?</li> <li>6. If the device is used for diagnostics, what is the capacity for follow-up care?</li> <li>7. Which alternatives exist that could also address this problem?</li> </ol>
Implementation	<ol style="list-style-type: none"> <li>1. Which local staff member or department has agreed to be responsible for the device once it arrives at a facility?</li> <li>2. Is there sufficient and appropriate physical space to house this device?</li> <li>3. How will local clinicians be trained to use this technology proficiently?</li> <li>4. If implementing a new device, which tracking, maintenance, and repair systems need to be in place?</li> <li>5. Is there adequate security to avoid misuse or theft?</li> <li>6. Is the supply chain capable of sourcing repair parts for this device?</li> <li>7. Does the local facility have financial means to maintain this device?</li> <li>8. Is this device still supported by a manufacturer?</li> <li>9. Will the manufacturer provide technical advice or support to local clinicians?</li> <li>10. Do local clinicians foresee problems with this device?</li> </ol>
<p><sup>a</sup> Questions based on World Health Organization. Health technology assessment of medical devices.<sup>6</sup></p>	

It should be noted that properly responding to each item in this guide necessitates engaging local clinicians and government leaders. In lieu of formal HTA, this guide can be used by NGOs to initiate a partnership with an MoH. This guide can also be used to periodically re-evaluate devices and technologies already in use, to consider whether and how resource distribution is enhanced or undermined by using a device or technology, and to help avoid “socialization for scarcity,”<sup>8</sup> which happens when NGOs and MoHs fail to pursue innovation when systemic barriers are perceived to be too challenging.

### **Ultrasound Technology**

The students in this case are to be commended for wondering about broader implications of transient prenatal ultrasound screening. If we assume that the screening intervention is justified according to the criteria in the Table and that visiting faculty members instruct local clinicians on using portable ultrasound machines, then pressure from local clinicians could influence the MoH most. Accurate dating of pregnancies would allow women to plan travel to a local maternity waiting home. Detecting multiple gestation and breech presentation would help identify high-risk pregnancies and facilitate timely transfer to a local level 1 hospital, which could be far away. As discussed below, if we further assume that the region's expected reduction in maternal mortality approaches MoH goals, United Nations (UN) Sustainable Development Goal 3,<sup>9</sup> and Global Surgery 2030 goals,<sup>10</sup> then the NGO in this case would have implemented a health technology intervention that motivates existing health system priorities and withstands ethical scrutiny.

### **International Mandates**

The proposed criteria in the Table enable evaluation of NGO device interventions within the context of a local health system and international mandates, such as those of the WHO. Ideally, a host nation's MoH incorporates WHO mandates in its policies and practices. However, in practice, their adoption may be incomplete. In such cases, NGOs should be aware of WHO mandates and evaluate their programs and technologies accordingly. In the absence of MoH guidance or capacity, the criteria offered in the Table can help influence decisions about which technologies and interventions are delivered and how and when they are introduced.

The highest-level mandates are 17 UN Sustainable Development Goals (SDGs). These 17 goals, which were adopted by the UN General Assembly in 2015, describe international development priorities through 2030.<sup>9</sup> SDG 3 relates to health care and seeks to "ensure healthy lives and promote well-being for all at all ages."<sup>9</sup> Of the 9 targets within SDG 3, 2 relate to devices: reducing maternal mortality (SDG 3.1) and reducing death and injury from road accidents (SDG 3.6). Both imply the need for surgical and diagnostic capacity building, which also requires technology.

The Global Surgery 2030 recommendations are the result of an extensive collaborative effort to address the global burden of surgical disease. The Lancet Commission on Global Surgery (LCoGS) elaborated quantifiable surgical system development goals to be achieved by 2030. The LCoGS proposed 2-hour access to a facility capable of performing 3 Bellwether Procedures (Caesarean delivery, laparotomy, and treatment of open fracture) as a core indicator of progress in health and surgical system development.<sup>10</sup> The LCoGS observed that hospitals capable of performing Bellwether Procedures not only have the personnel and infrastructure needed to care for most surgical patients but also sufficient staff and devices to provide multiple services.<sup>10</sup> Bellwether capacity indicates

elevated levels of local nonsurgical care as well by signaling inpatient care capacity, emergency room clinician skills, imaging technology, and laboratory services. Thus, technologies that enable progress toward developing Bellwether capacity strengthen an entire health system rather than simply providing care that targets the surgical system needed to address only specific needs or conditions.<sup>10</sup>

## Conclusion

Criteria for evaluating health care technologies are essential if NGOs are to ethically and sustainably introduce such technologies in LMICs. The evaluative framework offered here can serve as a foundation for transparency and accountability in public-private partnerships that seek to motivate local, national, and international health care and development goals.

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## MEDICAL EDUCATION: PEER-REVIEWED ARTICLE

### How the Social Contract Can Frame International Electives

Shailendra Prasad, MBBS, MPH, Fatima Alwan, MS, Jessica Evert, MD, Tricia Todd, MPH, and Fred Lenhoff, MA

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#### Abstract

Short-term experiences in global health (STEGHs) are common ways trainees engage in global health activities, which can be viewed by students as either altruistic or opportunistic. This article explores how STEGHs express the social contract medicine has with society, emphasizes areas of breakdown in this social contract, and calls for medical schools, licensure boards, STEGH-sponsoring organizations, and professional societies to take active roles in addressing these ethical challenges.

#### International Health Experiences

Global health has been defined by Koplan et al as an “area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide.”<sup>1</sup> A common practice in this field is for health professions students, trainees, and professionals to undertake short-term experiences in global health (STEGHs). STEGHs are varied and include clinical activities, research, capacity building, and public health practice. By 2004, 22% of graduating US medical students had had international health experiences.<sup>2</sup> Based on data from 1996 to 2015, 9% to 83% of US residency programs (depending on specialty) have offered global health training.<sup>3</sup> Available data overwhelmingly support that STEGHs are beneficial for students and trainees, as they are associated with these groups’ increased levels of idealism, cultural competence, social responsibility, and service to the underserved.<sup>4</sup>

However, these benefits can come at a cost to the host communities. Although a common motive for participation in STEGHs is the desire to help in an underserved setting,<sup>5</sup> this desire and obligation to be helpful—and the false confidence conferred on students and trainees by their presumed capability<sup>6</sup>—underlies many of the ethical challenges of STEGHs. In addition, there is evidence that prehealth students view

STEGHs as an opportunity to get hands-on clinical experience not allowed in the United States due to legal, ethical, and safety considerations.<sup>7</sup> Students seek these experiences in part to augment their applications to medical and other health professions schools,<sup>8</sup> despite concerns about patient harm.<sup>9,10,11</sup>

Multiple [standards and guidelines](#) have been developed to emphasize that STEGHs should have an educational focus with appropriately scoped and supervised service.<sup>12,13,14</sup> Some have argued that hands-on clinical care with visiting trainees serving as clinicians is never an appropriate component of STEGHs.<sup>15</sup> Here, we examine the ethical challenges associated with STEGHs through the lens of the social contract between society and medical education. We argue that the social contract requires medical education institutions to take an intentional approach to STEGHs for premedical and undergraduate medical students as well as residents.

### **Social Contract and International Education**

Medicine and society can be said to have a *social contract*, an idea derived from political science.<sup>16</sup> The contract refers to the expectations that society has of physicians to be competent, ethical, and responsive to the health needs of society<sup>17</sup> in return for what society provides physicians, ie, “status, respect, autonomy in practice, the privilege of self-regulation, and financial rewards.”<sup>18</sup> While the social contract in medicine is multifaceted and mostly implicit,<sup>18</sup> one of its aspects is particularly relevant to medical education: the expectation of clinical competence. This expectation manifests as the obligation of medical professionals to maintain competence in their chosen fields and to ensure appropriate discipline of incompetent, unprofessional, or unethical practitioners through [self-regulation](#). Implicit in the expectation of competence is that training constitutes society’s investment in future professionals.

Unfortunately, the social contract’s expectation of competence can have negative impacts on patients, who may experience inefficiencies, inconveniences, and risks due to interactions with students and trainees.<sup>19,20</sup> Inefficiencies and inconveniences are due in part to the necessary redundancies that result from oversight of trainee activities by a licensed physician.<sup>20</sup> Society—and patients themselves, through informed consent—accept these costs to ensure a supply of physicians and other health professionals who are inculcated with a sense of professionalism.<sup>21</sup>

### **Breakdown During International Education**

The social contract in medicine functions when society is relatively well organized and when both society and the medical profession share the same values and structures.<sup>22</sup> While particular aspects of the social contract related to societal expectations of medicine—including altruistic service and promotion of public good—are ostensibly the reason for the creation of STEGHs,<sup>18</sup> other aspects of the social contract, such as competence and accountability, may not be consistently satisfied in such experiences.

*Competence.* Although guidelines for international health-related experiences from the Forum on Education Abroad recommend that student interaction with the patient and community not exceed what would be permitted in the United States,<sup>23</sup> in STEGHs students may be put in positions that compromise the safety and well-being of the patient and student, which raises significant ethical and legal concerns.<sup>10,11,24</sup> While medical volunteers' desire to "help" seems consistent with universal values and instincts,<sup>25,26</sup> rarely is there any assurance of competence.

*Accountability.* In the absence of any worldwide medical credentialing, licensure, and oversight system, a clear localization of the society that is a party to the social contract is essential. At its core, the social contract aims to ensure a steady supply of appropriately equipped, vetted, and credentialed physicians in the society where students train. In a majority of STEGHs, however, the society that assumes the risk and inconvenience involved in training will not benefit from students' future service as health professionals. Thus, the social contract should be considered geocentric, as the society that bears the burden of training the students should also benefit when the students become physicians.

*Promoting public good.* Clinical care in settings outside of one's home country may be significantly different depending on the cultural and social determinants of health, languages spoken, clinical protocols, and health system realities that depend on political and economic conditions. These aspects can contribute to misalignment of STEGHs' operation and mission in the host country. One of the primary concerns is the lack of real partnership between local health care practitioners and volunteers.<sup>13</sup> Besides reinforcing negative stereotypes of communities and local health care practitioners, inadequate or nonexistent collaboration contributes to active undermining of local health care systems.<sup>9,27,28</sup> Consideration of potential benefits and harms is of particular importance in providing care in communities that lack resources, as STEGH resources might be used in more effective and culturally responsive ways if they were applied in an existing health care system.<sup>4</sup> Indeed, human resources for health (HRH) strategies and plans exist at the country, regional, and global levels, but none propose that medical students from high-income countries (HICs) undertake clinical electives as the solution to health disparities or HRH shortages.<sup>29</sup> No research we are aware of suggests that international trainees completing rotations can effectively or appropriately supplant low- and middle-income countries' (LMICs') local health care workforce. Thus, institutions that are facilitating these activities in both HICs and LMICs need to be realistic about the role of trainees and to recognize that adequately supervising them diverts human resources from providing care.<sup>12,14</sup>

### **Institutions' Responsibilities**

The responsibility of ensuring that the social contract between medicine and society is honored rests with the institutions of sending countries—in particular, medical schools, residency and fellowship programs, [state medical licensure boards](#), STEGH sponsoring organizations, and professional societies.

Professional self-regulation, as a part of the social contract, is ensured by appropriate licensure and [discipline](#). From a legal perspective, for example, no student or health professional should be practicing or teaching in another country without an appropriate contractual agreement or the equivalent. Health professionals or trainees are required to adhere to their licensed scope of practice, just as students are not permitted to perform any activities they would not be able to perform at home without sufficient and proper oversight.<sup>23,30</sup> Although the purview of state medical licensing boards does not extend beyond a state's borders, boards and professional societies should set clear expectations of legal and ethical boundaries for those participating in STEGHs.

Medical institutions must also honor the social contract. Medical school admission processes encourage applicants to have had meaningful exposure to clinical experiences, and many students use STEGHs as a way to attain this exposure. In the absence of global regulations or enforcement mechanisms governing supervision of students, medical schools should ensure that safe opportunities exist for medical students to participate in global health learning opportunities that are congruent with their skills and supported in an ethical manner. From a safety and ethical viewpoint, it also behooves medical schools to clearly define graduates' level of global health training. To ensure compliance, this stipulation could be enforced through medical school accreditation requirements. While exposure to global health undoubtedly informs and augments the education of medical students, from an educational and ethical perspective, it is imperative to de-emphasize the primacy of clinical experiences as a mechanism to learn the essential tenets of global health.<sup>25</sup> Medical schools should instead highlight the importance of nonclinical and health systems-based learning in international settings. This approach would enable future physicians to be responsive to the health needs of the society in which they intend to practice—an essential tenet of the social contract.

### **Conclusion**

Despite the best intentions of stakeholders, STEGHs present significant ethical and legal challenges and might inadvertently undermine the development of professional values among volunteers and further exacerbate health disparities between sponsoring and host communities. A key aspect of meeting these challenges, as we have discussed, is the difficulties in applying the social contract to varied countries and communities. More research on this topic, along with concrete solutions from key national and international entities, is desirable. There are large variations from one STEGH to another, and too much responsibility is left in the hands of STEGH sponsors, the host community, and the volunteers themselves. It is within this regulatory vacuum that clinical and ethical lapses

are practically guaranteed to occur; without any regulatory action, these lapses will continue unabated, and experiences in global health will ultimately not ameliorate worldwide disparities in health.

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**MEDICAL EDUCATION: PEER-REVIEWED ARTICLE**

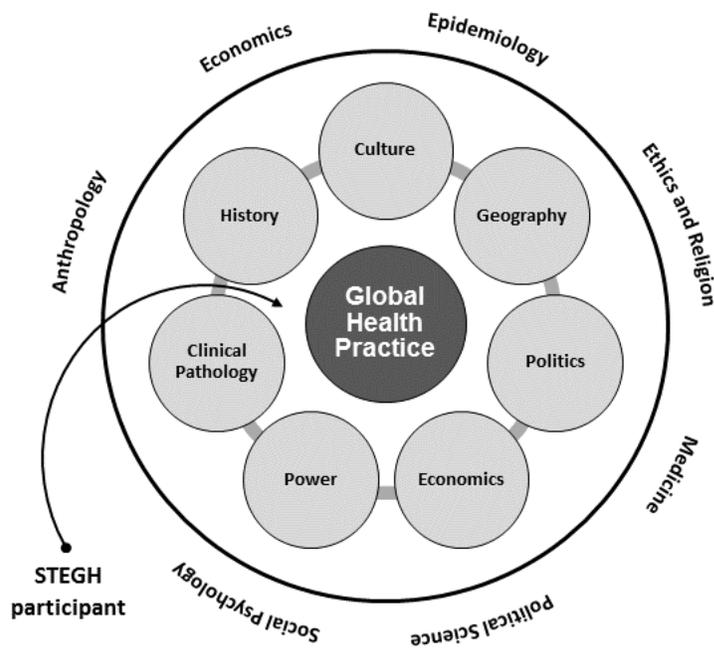
**Facilitating Critical Self-Exploration by Global Health Students**

William B. Ventres, MD, MA

**Global Health, Complexity, and Self-Awareness**

The work of global health is complex.<sup>1</sup> It is as much about the study and application of anthropology, economics, political science, and psychology as about physiology and pharmaceuticals.<sup>2</sup> It is as much about pathologies of power and good governance as about emerging infectious diseases.<sup>3,4,5</sup> It is as much about relationships as about medical science.<sup>6</sup> Opportunities for US-based health professions students and trainees to examine these complexities often come in the form of short-term experiences in global health (STEGHs)—service-learning immersions in international and domestic settings of need (see Figure 1).

**Figure 1.** Complexity in Global Health Practice—Representative Considerations and Areas of Study for Participants/Learners on STEGHs



Much has been written about the need for participants in service-learning experiences to contemplate the ethics of their involvement,<sup>7,8,9</sup> but this focus commonly ignores the ways in which self-awareness is integrally intertwined with the concept of global

health.<sup>10</sup> Self-awareness is the ability to recognize and appreciate one's perspectives—understandings, values, and biases—in relation to the complicated interpersonal and material worlds in which one lives.<sup>11</sup> These perspectives are borne of experiential histories and acquired knowledge that give meaning to thoughts and actions.<sup>12</sup> Insofar as STEGHs expose students and trainees to clinical and cultural environments markedly different than those to which they are accustomed, STEGHs create opportunities to cultivate self-awareness and, ultimately, foster mutually beneficial relationships that are relatively free of exploitation.

Absent self-awareness, US health professions students and trainees on STEGHs can project cultural insensitivity,<sup>13</sup> act in ways that perpetuate patterns of domination,<sup>14</sup> or unwittingly sabotage well-laid plans for implementing appropriate health care interventions.<sup>15</sup> They could also underestimate the difficulty of creating equitable partnerships and promoting social change given significant differences in power, capital, and culture that exist around the world.<sup>16</sup> Indeed, for students and trainees on STEGHs, self-awareness can be a defense against cultural ignorance or a lack of empathy and can help foster global humility.<sup>17</sup>

Nonetheless, simply participating in a STEGH does not guarantee growth in self-awareness and may even reinforce harmful preconceptions and prejudices. Pre- and post-STEGH educational sessions can help ameliorate such untoward consequences,<sup>18</sup> just as writing narrative essays and attending to ethical guidelines for global health experiences can aid in personal and professional development.<sup>19,20,21,22,23</sup> However, the key to growing self-awareness in relation to global health is critical self-exploration—the mindful, imaginative, and enduring practice of identifying and challenging one's assumptions and actions in light of new information arising from exposure to new surroundings and the passage of time.<sup>24,25,26</sup> On the basis of my more than 30 years' work as a clinician-educator serving in US safety-net clinics and on several international engagements, I contend that developing self-awareness by practicing critical self-exploration is crucial for health professions students and trainees taking part in STEGHs.<sup>27</sup>

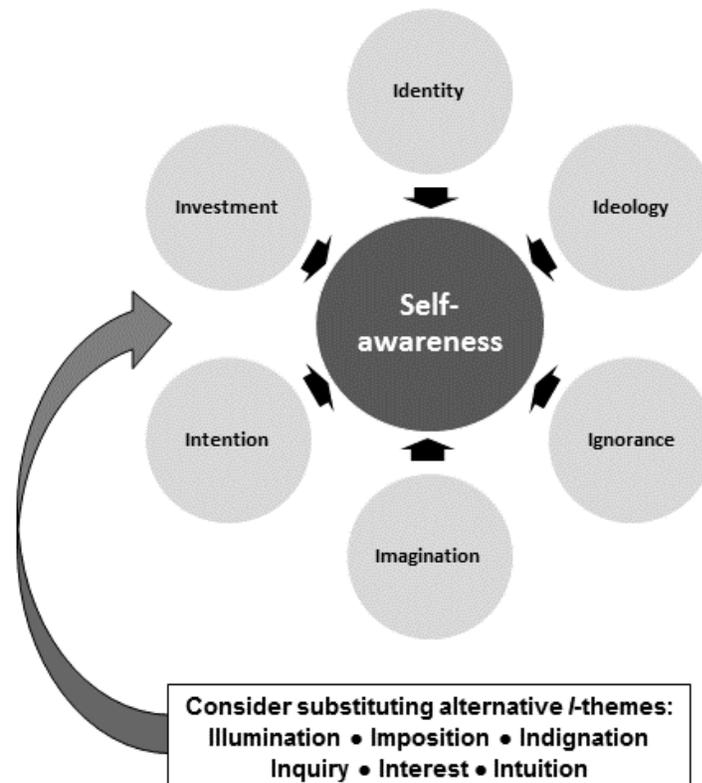
To encourage activities aimed at critical self-exploration in the context of STEGHs, I suggest 6 themes for use as reflective prompts: identity, ideology, ignorance, imagination, intention, and investment. These themes have emerged from experiences and conversations I have had and observations I have made along my professional path.

### **I-Themed Reflections for Global Health Immersions**

Each theme begins with the letter *I* to emphasize [self-reflection](#) as a critical component of professional development,<sup>28</sup> cultural competency,<sup>29</sup> and the transmission of knowledge<sup>30</sup> (see Figure 2). Each builds on the concept of social construction,<sup>31</sup> the idea that what we authentically bring to interpersonal encounters and how we interact in

these encounters help us learn both individually and in community with others.<sup>32</sup> Each theme is paired with several self-reflective questions informed by the framework of *appreciative inquiry*, an asset-based approach that promotes successful interactions in challenging environments.<sup>33</sup>

**Figure 2.** *I*-Themes for Developing Self-awareness as Participants in Short-term Global Health Experiences



*Identity.* Identity can be defined as the distinguishing character or personality of an individual. In the context of STEGHs, identity is linked to one’s relational “footprint” and, accordingly, encompasses such interpersonal qualities as reciprocity, generosity, and presence.<sup>34</sup> In the context of global health, questions that speak to building and maintaining an authentic identity<sup>35</sup> that fosters the compassion and insight essential to equitable, collegial, and supportive relationships include the following:

- How has my global health work informed who I am as an individual, as a member of a professional community, and as a representative of the larger community in which I live?
- What have I learned, what am I continuing to learn, and what do I anticipate learning in the future?
- How might I mentor others as they progress down their own paths of learning?

- How can I work to recognize the authentic identity of other people in their home settings?

*Ideology.* Ideology can be defined as a system of beliefs that prescribe how people in a group are typically expected to act. Ideologies are typically religious, economic, or political in nature and may manifest as projections of power.<sup>36</sup> Across boundaries of culture and geography, ideologies often compete with each other. As such, it is worthwhile to ask the following questions:

- What ideologies, explicit or implicit, drive my motivations?
- How do I express the ideologies I hold in settings both similar to and different from those to which I am most accustomed?
- How might I open myself up to inquiring about and identifying the ideologies that guide others' behaviors?
- Once these ideologies are identified, how might I work to comprehend the reasons they exist as important aspects of peoples' lives?

*Ignorance.* Ignorance is a lack of information or the state of being uninformed. It is a major factor in people's inability to appreciate how societal forces create and perpetuate adverse social determinants such as poverty,<sup>37</sup> racism,<sup>38</sup> gender discrimination,<sup>39</sup> and globalization.<sup>40</sup> The following 4 questions can help circumscribe the limits of one's knowledge and awareness.

- How do I react when I realize I do not know something important?
- What interpersonal challenges am I encountering vis-à-vis the people with whom I am working, and how might these challenges encourage me to identify and examine my own implicit biases?
- What have I learned that I did not previously know?
- How shall I make use of my new understandings in service to others as I develop my own global fluency?

*Imagination.* Imagination can be defined as the ability to be creative and resourceful or as the capacity to use creativity in the service of adaptability. Both traits are essential in many areas of the world where accessible medical care is lacking. This reality suggests 4 questions:

- What is it like to practice as a local health professional in this setting?
- What do characteristics such as competency and usefulness look like here, based on the local, resource-limited circumstances that exist?<sup>41</sup>
- Can I imagine what it would be like to walk in the shoes of the people who live here continuously?

- What would it mean for us to work with, and not just for, others—wherever we are, with whatever we have, in the moment at hand?<sup>42</sup>

*Intention.* Intention can be defined as the purpose that underlies actions. It includes aspects of forethought and planning as part of the process that moves people to act. Exploring one's [intention in participating in STEGHs](#) is especially important for positioning one's objectives on the spectrum between learning and service (ie, between enhancing open-minded understanding and achieving purposeful outcomes). Intention suggests several questions, especially when one is faced with clinical concerns beyond the scope of one's previous training.

- Why am I doing this work?
- What do I hope to get out of it?
- Whom does it primarily serve?
- What effects of my interactions here will reverberate into the future?

*Investment.* Investment can be defined as devoting time, effort, and energy to undertakings with the expectation of worthwhile results. Expectations of STEGHs vary, depending on how much one is willing and able to contribute. Reasonable questions include the following:

- Am I dedicated to working overtime in service of reducing the social inequities that undergird unequal outcomes in health and illness?
- How can I balance my needs for personal exploration and professional gratification with the acknowledged needs of others?
- If my efforts involve a long-term commitment, how might I share the success of my work with others, especially with colleagues who, by necessity, live and work in areas of need?<sup>43</sup>

### **Further Considerations**

The use of these *I*-themed questions to promote self-awareness is appropriate before, during, and after participation in STEGHs. As with any educational activity that may well touch on emotional issues, care must be taken to create a safe space for learners to disclose deeply personal concerns.<sup>44</sup> Many pedagogical modalities—among them [narrative writing exercises](#),<sup>45</sup> prospective case-study discussions,<sup>46</sup> presentation of relevant movies or film clips,<sup>47</sup> and even interactive online courses<sup>48</sup>—can be used to initiate self-exploration using the above questions. However, simply encouraging STEGH participants to share their personal reflections as they arise may be the most effective method to stimulate the growth of self-awareness.<sup>49</sup> Such critical incident learning, cultivated by STEGH participants' sense of curiosity, suspension of immediate judgment, and mindful attention to experience,<sup>50</sup> can occur individually with supportive mentors or in groups with peers.

Of vital importance, these *I*-themes should neither be perceived as simply an inventory of competencies to be acquired nor taught as bullet points for rote acquisition.<sup>51,52</sup> Coupled with an inquisitive stance vis-à-vis other people,<sup>53</sup> they are prompts to learning through emergent reflection. Furthermore, they should not be seen as comprehensive in scope. Other *I*-themes are equally suitable (eg, illumination, imposition, indignation, inquiry, interest, or intuition), and non-*I* words pose assorted alternative themes for further inspiration. Lastly, none of the *I*-themes concerns solely international initiatives. Students and trainees might substitute *local* for *global* and consider how their points of view shape their personal and professional formations at home.<sup>17</sup>

### Conclusion

STEGHs are one way for US health professions students and trainees to begin to appreciate the complex nature of the work of global health. By developing self-awareness through critical self-exploration, budding health professionals can maximize their ability to learn—conscientiously, collaboratively, and constantly—about this complexity. My hope is that these *I*-themes and corresponding questions will help participants in STEGHs in this endeavor, which is essential to enriching global health practice and advancing the health of the public.

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## MEDICAL EDUCATION

### What Does a Mutually Beneficial Global Health Partnership in Family Medicine Residency Look Like?

Elizabeth Hutchinson, MD, Vanessa Kerry, MD, MSc, and Sadath Sayeed, MD, JD

#### Abstract

Motivated by interest in enhancing their clinical experience and contributing to communities in need, US medical resident physicians are increasingly keen to train abroad. Guidelines are needed to help ensure that trainee, institutional, and faculty engagement in global health is ethically appropriate and mutually beneficial for all involved. Supported by the nonprofit organization Seed Global Health, the WWAMI-University of Malawi/College of Medicine partnership leverages long-term US faculty to structure rotations for Malawian and American trainees and endorses strong onboarding, monitoring, and evaluation practices and a mutually beneficial bidirectional international partnership and exchange model.

#### Global Health Experiences

Global health has been defined by Koplan et al as an “area of study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide,”<sup>1</sup> and it is increasingly recognized as an important component of medical education in the United States. Many medical schools and residencies that have global health programs have established ways to incorporate global health immersion experiences.<sup>2</sup> Today, about 36% of medical students have volunteered abroad.<sup>3</sup>

Academic global health programs are motivated not only by increased student and trainee demand but also by a range of pragmatic, consequentialist considerations.

- Globalization of diseases directly impacts our local communities; knowledge about and experience with diseases that used to exist only outside of our borders is increasingly relevant to taking care of patients within our national borders.<sup>4</sup>
- US-based medical students and trainees can gain a deeper understanding of a new culture with a firsthand experience abroad and, as a result, are potentially primed to better value the diversity of their colleagues and patients in the United States.<sup>5,6</sup>

- US-based trainees can gain a better perspective on sensible resource utilization that can inform their future practice and empower them to practice medicine with less reliance on costly technology and tests.<sup>7</sup>
- US-based trainees who have the opportunity to practice in a resource-limited setting may be more likely to work in a resource-limited setting domestically after graduation.<sup>8</sup>

Despite students' and trainees' growing interest in global health, there remains little standardized guidance for how to build these experiences ethically. In 2010, Crump and Sugarman facilitated the Working Group on Ethics Guidelines for Global Health Training (WEIGHT).<sup>9</sup> WEIGHT suggested a set of guidelines intended to encourage good practices for those who develop global health immersion programs. The mutual partnership model we describe below incorporates and expands upon those guidelines.

### **Mutual Partnership**

In 2009, Malawi's Ministry of Health (MOH) recognized the need for and value of training family physicians to meet the medical needs of Malawi's population. The MOH outlined a primary care-based system comprising family physicians working at district-level hospitals around the country. The goal to train a cadre of family physicians for the workforce was ambitious but exceeded available resources within Malawi.<sup>10</sup> Malawi's MOH and the University of Malawi College of Medicine (COM) therefore partnered with Seed Global Health (Seed), a US-based nonprofit whose mission is to strengthen human resources for health in countries facing severe shortages; Seed's model includes placing experienced clinical faculty at local training institutions for longer-term capacity building and support of local medical and nursing educational needs.<sup>11</sup> In 2014, with buy-in from the Malawi COM and MOH, Seed partnered with the Swedish Family Medicine Residency Program, which is part of the [University of Washington](#) (UW) Family Medicine Network, to pilot placement of select US senior family medicine residents (USRs) in Malawi as an extension of its local clinical educational support efforts.<sup>12</sup> The first author (E.H.), then a Swedish Family Medicine Residency Program faculty member who served as a Seed educator, catalyzed the partnership, seeing it as an opportunity for a novel collaboration to build capacity for both Malawi and US medical education. The goals of this partnership are to improve the training environment for Malawian health care students and residents; support the regional (Mangochi) health system's efforts to deliver comprehensive, integrated care; and provide US residents an ethically sound opportunity to develop new knowledge and skills and to advocate for individual and community health in resource-poor settings.

Below we highlight several key components of this partnership from August 2014 to date.

*Structured program.* USRs (from UW-affiliated programs) travel to Mangochi District Hospital (MDH), a principal family medicine training site in Malawi, between August and the following June. Arriving in pairs for 4-week rotations, USRs work alongside Malawi-based Seed faculty to support the academic learning environment. Specifically, USRs participate in clinical care alongside Malawian residents and students, exchange knowledge through bedside and didactic teaching, support quality improvement projects, reinforce concepts integral to family medicine training (ie, multidisciplinary interactions, biopsychosocial approach, and community-oriented primary care) and build deep friendships with Malawian residents, faculty, and hospital staff.

*Routine evaluation and monitoring.* Following each USR rotation, members of the MDH staff, Malawian medical students, and COM faculty anonymously fill out surveys evaluating the impact of the visiting USRs. COM, in-country Seed staff and faculty, and UW faculty annually meet in person, review the surveys, and discuss the perceived benefits and burdens of the partnership. Jointly, they assess how well the partnership is meeting its goals and whether it should continue for another year. If at any time the COM or MOH feel that the arrangement is too burdensome, it would be stopped without negative impact to the ongoing Seed-supplied faculty support to the family medicine program in Malawi.

*Selection of trainees.* Recognizing the significant challenges to creating a genuine value-added opportunity with visiting USRs who come to Malawi for only one month, the UW faculty coordinator establishes clear sets of expectations for interested participants and rigorous selection criteria for admission to the program. USRs fill out an application that includes essay responses to questions that address their motivation and level of insight about anticipated challenges. The USR's program director then provides a recommendation as to whether the USR is qualified to participate. The UW faculty coordinator additionally interviews the applicant to confirm interest and probe his or her fitness for the program. Humility, flexibility, and resilience are essential qualities.

*Orientation and preparation.* At the beginning of the academic year, all USRs attend an orientation that clearly defines the roles and responsibilities of the rotation as well as cultural and professional expectations. Through guided conversations, trainees grapple with ethical considerations of working overseas and the reality that most short-term visitors are considered by their local hosts as more burdensome than helpful. Prior to travel, each USR meets with a UW faculty member to review orientation materials, ensure readiness, and ask questions. Since the pilot program began in 2014, future participating USRs have attended monthly global health case presentations by residents who have returned from MDH. They are expected to be familiar with the Malawi Standard Treatment Guidelines<sup>13</sup> and other local MOH resources that are relevant to care given in Malawi as well as the current longer-term capacity-building projects supported by Seed at MDH. These ongoing and interlinked experiences help build a sense of

continuity over time. After returning home, USRs have extensive debriefing meetings with the UW coordinating faculty member to address any issues and to ensure timely responses to any USR or local host concerns. UW faculty and USRs work together to keep the orientation materials up-to-date. These documents provide a living repository of group wisdom, so that time spent on in-country orientation is kept to a minimum.

*Comprehensive accounting of costs.* Many costs in implementing a global health rotation have a clear price tag (eg, travel costs, housing), but there are others that do not. All quantifiable expenses are paid for by the USR with support provided through domestic fundraising efforts. Malpractice insurance is covered by the USR's home teaching institution. In-country administrative tasks are managed by a Malawian coordinator, employed by the COM, who receives salary support from US partners. USRs and faculty raise funds and gather donated supplies in order to offset the costs of their consumption of local supplies in Malawi during the course of their rotation.

*On-site mentorship and supervision.* Seed faculty provide the principle supervision of USRs to minimize the additional burden on host-country faculty. Direct supervision and mentoring by long-term Seed faculty<sup>11</sup> with established relationships to local staff and familiarity with both local approaches to patient care and local language and culture help USRs integrate into the setting and utilize their skills. Direct supervision and mentoring can also prevent trainees from being placed in ethically problematic clinical service assignments<sup>14</sup>; visiting trainees from resource-replete environments could have an inflated sense of the value of their skills while underestimating the strain they add to an already overwhelmed local system.<sup>14</sup>

*Bidirectional exchange.* Bidirectional exchange is a critical contribution to [equity in global health partnerships](#). During their third year of training, Malawian residents are sponsored to come to the United States for a 4- to 6-week rotation at a UW-affiliated program. The opportunity increases their exposure to health care practice in a relatively resource-replete setting, informs their sense of what should be possible in Malawi, and helps supplement specific training and learning gaps. Malawian residents also participate in a global health leadership course and learn about community health in the US context.

*Focus on education and empowering Malawian education leadership.* Expansion of the health care workforce is a strategic goal for the MOH, but there is a paucity of [clinical education programs](#) to support this need.<sup>10</sup> The partnership intentionally chose this focus rather than research. Research collaborations are often led by Global North academics and supported by government, philanthropic, or industry funding; while these resources can benefit institutions or individuals in resource-poor settings, they also risk driving these same institutions to become the "repository of raw materials for expatriate-driven research."<sup>15</sup> The goal of the Seed Global Health-MOH/COM partnership is to fill a mutual

educational gap built on mutual respect, common priorities, and a shared commitment to excellence in education and patient care.

The model of partnership we have described attempts to prioritize fundamental ethical principles in the pursuit of global health aims. Global North actors such as US-based academic institutions and nonprofits typically enjoy a power advantage over their Global South counterparts because the former comes to the negotiating table with significant resources (financial, material, human) that the latter might benefit from accessing. Such a power dynamic can insidiously cut against the goal of mutual respect, for example, through mission or agenda setting on the part of the Global North participants. Defining what is genuinely beneficial to all stakeholders—and doing so transparently—is, we argue, an essential first step toward any ethical collaboration in global health practice. Simultaneously, the Seed Global Health-MOH/COM partnership model attempts to encourage a deeper **mindfulness** on the part of individual actors (USRs, US faculty) about the unseen costs of their presence as health care practitioners in settings of severe poverty. Despite the best of intentions, it would be easy to cause more harm than good if Global North partners were not vigilant in listening to their local partners and willing to routinely revisit the terms of their engagement and its continued utility for all involved.

## Conclusion

In 1969, an editorial in the *Journal of the American Medical Association* stated, “If, as a routine, young American doctors were encouraged to spend some months working in a developing country before they became tied to the responsibilities of practice, the result could only be better medicine at home and abroad.”<sup>16</sup> The sentiment is elegant and simple enough, but its ethical implementation remains fraught a half-century later. It is clear that practicing global health—caring for and about the well-being and health outcomes of all people, regardless of the luck of birth circumstances or citizenship—is a worthy and ambitious moral goal. We argue that achieving this goal—effectively, respectfully, and equitably—requires great humility on the part of those positioned to provide assistance.

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## MEDICAL EDUCATION

### Which LCME Accreditation Expectations Support Quality and Safety in Global Health Immersion Experiences for Medical Students?

Robert Hash, MD, MBA and Barbara Barzansky, PhD, MHPE

#### Abstract

Almost all allopathic medical schools in the United States allow students to participate in global health immersion experiences. The Liaison Committee on Medical Education accreditation requirements specify that students' home institutions are responsible for overseeing learning experiences, assessing and mitigating risk, ensuring appropriate supervision, and offering instruction about what to expect, ethically and culturally, in a learning setting. Students should also have opportunities to debrief about their experiences.

#### Global Health Experiences

In a survey of MD-granting medical schools during the 2016-2017 academic year administered by the Liaison Committee on Medical Education (LCME), 140 of the 145 surveyed schools offered international experiences.<sup>1</sup> These most commonly occurred in the fourth (and final) year of the curriculum but could also have been available earlier.<sup>1</sup> Medical students choose global health immersion experiences for a number of reasons, including an altruistic desire to serve those with poor access to health care or a desire to practice and expand their clinical skills, expand their understanding of global health challenges and issues, gain exposure to the diagnosis and treatment of diseases uncommon in the United States or to advanced states of disease, or gain experience in cultures and with languages different from their own. International and global health experiences have been shown to positively influence cultural awareness, intention to work with underserved populations, and consideration of primary care specialty choice among participating students.<sup>2</sup> While there are many educational benefits associated with international rotations, there can be risks to both students and patients. For example, students might wish to visit locations that pose dangers to their health and safety. They also might be asked to provide care and perform procedures beyond their level of experience and competence.

MD-granting medical schools typically support student engagement in global health immersion experiences by helping students find an experience, providing financial and administrative support, and granting academic credit for such experiences. In so doing, schools bear ultimate responsibility for meeting LCME accreditation requirements: taking

reasonable steps to ensure students' adequate preparation and supervision, ensuring students' participation is appropriate to their level of training, ensuring students' safety, and ensuring appropriate clinical oversight, among others.

### **LCME Accreditation Requirements**

To be eligible for postgraduate (residency) training in the United States, physicians must have graduated from MD-granting medical schools in the United States and Canada whose medical education programs are accredited by the LCME. LCME accreditation is assessed by peers who determine whether a medical education program has achieved an acceptable level of quality. In reviewing a program, the LCME assesses the program's performance on 93 elements organized under 12 standards.<sup>3</sup> Four elements apply directly to schools' global health immersion offerings.

1. The LCME does not require schools to provide international or global health experiences. However, Element 6.6 (service-learning) requires schools to "provide sufficient opportunities ... in service-learning and community service activities."<sup>3</sup> We are aware that many schools include elective international or global health immersion activities in their list of service-learning and community service curricular activities.
2. Element 7.7 (ethics) states that schools must "ensure that the medical curriculum includes instruction for medical students in medical ethics and human values both prior to and during their participation in patient care activities and requires its medical students to behave ethically in caring for patients."<sup>3</sup> Although not explicitly stated, the LCME expects that students will receive appropriate [instruction in ethics](#) relevant to patient care activities.
3. Element 9.3 (clinical supervision of students) states that the school "ensures that medical students in clinical learning situations involving patient care are appropriately supervised at all times in order to ensure patient and student safety, [and] that the level of responsibility delegated to the student is appropriate to his or her level of training."<sup>3</sup> The LCME's intent and expectation for this element, as applied to global health experiences, is that students will provide appropriate care and services under direct supervision of appropriately credentialed health care practitioners who practice within the scope of their training.<sup>3</sup> In global health experiences involving patient contact, supervising practitioners must be both licensed to provide the expected level of patient care and educationally prepared to supervise medical students. The LCME does not stratify this expectation based on location of the learning experience, domestic or international.

4. Element 11.3 (oversight of extramural electives) lists the oversight responsibilities of the school. These responsibilities include assessment of (1) “potential risks to the health and safety of patients, students, and the community”; (2) “the availability of emergency care” for students on the elective; (3) risk assessment for the possibility of “natural disasters, political instability, and exposure to disease”; (4) “the need for additional preparation prior to, support during, and follow-up after the elective”; (5) “the level and quality of supervision”; and (6) “any potential challenges to the code of medical ethics adopted by the home school.”<sup>3</sup> Many of these expectations are addressed through LCME requirements for all accredited medical education programs, regardless of where students take the elective. For international experiences, a school would have to ensure that these expectations are met on site prior to approving that site for offering an elective. This element also requires that “a centralized system exists in the dean’s office at the home school to review the proposed extramural elective prior to approval.”<sup>3</sup> This statement unequivocally places responsibility on schools for ensuring students’ safety, appropriate training for the experience, and quality of supervision.

### **Applying LCME Requirements**

The LCME judges programs’ performance on each of the above-listed elements individually for the purpose of accreditation. Beyond being the basis of accreditation decisions, accreditation requirements collectively create a larger framework of responsibilities for schools for clinical oversight, ethical behavior, personal safety, and health needs of students participating in global health immersion experiences.

In any clinical setting, there is a natural tension between providing oversight of student activities and permitting students to practice their developing skills. This tension is often amplified in global health immersion experiences in regions that are resource poor and among populations with poor access to health care services. Health care professionals in such situations are often stretched beyond their capacity, and students can be viewed as adequately prepared to provide some services independently or with minimal supervision, thereby creating a fertile environment for students to potentially practice beyond their level of experience and expertise. Similarly, students might feel pressured to provide services beyond their scope and without adequate supervision.<sup>4</sup> Host needs and patient expectations can sometimes lead to students feeling conflicted about—or overwhelmed by their knowledge of—their own limitations. This disconnect can pose ethical dilemmas for students in resource-poor clinical settings.<sup>5</sup> For example, a student could be asked to attend patients unsupervised or be expected to perform unsupervised deliveries of newborns. In either case, a student could be faced with a dilemma that may be characterized as “[no care vs care](#) by a somewhat trained but unlicensed student.” LCME Element 9.3 is intended to prevent students from being put in this situation.<sup>3</sup>

Students engaging in global health immersion experiences in resource-poor regions face potential physical and mental health hazards including infectious diseases, vehicular trauma, personal violence, food and water contamination, environmental hazards, emotional stress, cultural dissonance and cultural shock, fatigue, sleep deprivation, and a sense of isolation and helplessness.<sup>6,7,8</sup> Compliance with LCME accreditation standards and elements requires that schools, at a minimum, assess these risks, counsel students on risks and prevention strategies prior to international experiences, and provide physical and emotional support services and resources to students as needed when they return home.<sup>9</sup>

LCME standards and elements are for the most part nonprescriptive. They generally do not describe how schools should address requirements but rather require that student preparation, curricular content, and program responses to problems be sufficient to meet students' needs and LCME expectations for acceptable practice. Current literature suggests that preparing students for global health immersion electives could include their reviewing reports from prior students, becoming familiar with resource disparities they are likely to observe among patients and communities, anticipating the need to develop responses to ethical questions and to various cross-cultural influences on health belief systems they are likely to encounter, and considering how these factors might influence how they cope in their international environments.<sup>6,7,10,11</sup>

The LCME does not prescribe the content or amount of ethics training required for global health immersion programming.<sup>3</sup> At a minimum, the LCME expects that a school's ethical standards will be followed regardless of educational setting. Experts suggest that additional training could include helping students consider their **host communities' influences**—both positive and negative—on their understandings of ethics, social determinants of health, origins of global health inequity, and the nature and scope of their ethical responsibilities to practice medicine in ways that are culturally appropriate and within their level of expertise.<sup>12,13,14,15</sup> Postexperience debriefing has also been emphasized as a valuable ethical component of global health immersion experiences<sup>16,17</sup> that allows students to discuss what they encountered during their learning experiences.

### **Conclusion**

MD-granting US medical schools that support curricular offerings and electives in global health immersion experiences have responsibilities to ensure that those experiences conform to LCME accreditation standards and elements and, as such, are comprehensively designed to protect both students and patients. Schools should consider consulting the current literature and subject matter experts to determine best practices for preparing students for and supporting them throughout these experiences.

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## MEDICAL EDUCATION

### How Should Schools Respond to Learners' Demands for Global Health Training?

Claudia O. Gambrah-Sampaney, MD, Jesse E. Passman, MD, MPH, Andrielle Yost, MPA, and Glen N. Gaulton, PhD

#### Abstract

In the past decade, more students than ever entered medical school with the desire, if not the expectation, of participating in meaningful global health experiences. Schools must now weigh benefits to students of global experiences against burdens of students' learning experiences on institutions and individuals with whom schools partner. Most often, global health training is done as offsite immersion rotations in research or clinical settings. This article explores ethical dimensions of expanding global health offerings while respecting local partners' goals by focusing on the experience of the University of Pennsylvania's global health training programs.

#### Global Health on the Rise

Awareness of global health inequality as a social concern and global health as an emerging academic discipline is growing. This growth is perhaps fostered by more widespread appreciation that health in one region often directly and rapidly influences health in another.<sup>1</sup> We see this increased interconnectivity via traveling, sharing food sources that carry infectious agents, and learning how infectious and noncommunicable disease incidence is influenced by social determinants or by climate or geopolitical conditions.<sup>2,3</sup> Awareness of global health is also bolstered by the increasing prevalence and ease of commercial and social media.<sup>4,5</sup> Although attention is often focused on catastrophic global health events, such events increase awareness of disparities in global disease burden and in access to basic disease prevention strategies and health care.

Global health as a field has transitioned from focusing largely on humanitarian care provision or public health strategy implementation to focusing on health data, quantitative outcome measures, intervention sustainability, and rigorous scientific approaches to understanding disease in disparate populations and regions.<sup>6</sup> Trainees with interest in health professions now participate in these endeavors early in their education, often in baccalaureate programs.<sup>7</sup> As a result, medical schools and residency and fellowship programs have more students and trainees who expect global health experiences to be integrated into their training.<sup>8,9</sup> A key question this article addresses is how these programs can provide value in helping students both to develop their career

interests and to contribute meaningfully to [global health partnerships](#). If we fail to respond by crafting educational programs that are mutually beneficial and just, we risk exacerbating the training burden in already underresourced settings or, worse, promoting health professions trainees' socially and culturally insensitive or ethically inappropriate behavior.<sup>10</sup>

### **University of Pennsylvania Global Health**

Efforts are being made to develop global health competencies,<sup>11,12</sup> and several medical schools have recognized the importance of cultivating students' interests in global health through comprehensive training programs that are integrated throughout the curriculum.<sup>13,14</sup> At the Perelman School of Medicine at the University of Pennsylvania (Penn), with which the authors are affiliated, global health efforts begin early. We desire students who care deeply about humanity and are committed to health prevention, education, and [biomedical research](#) wherever the need for these exists. Penn's global health training opportunities for students are carefully articulated on the school's website<sup>15</sup> and explored during admissions interviews, orientation sessions, and career development workshops. Students in preclinical and clinical phases of training can participate in a range of offsite immersion experiences (lasting from 8 weeks to a year) and in formal certificate and degree programs.<sup>15</sup> On average over the past 10 years, 45% of Penn students engaged in a global health experience of no less than 8 weeks. Postrotation surveys indicate that these learning activities were uniformly emotionally rewarding and, in many instances, led students to pursue careers in global health.

Programs like ours must appropriately balance their institutional needs with their obligations to help their international partners solve national, regional, or local health care workforce or service delivery problems. We should ensure that offsite learning activities motivate rather than compete with local priorities, are culturally and socially appropriate, and that our learners are prepared to recognize and respond to ethical questions arising during their experiences. Penn's global health training programs have evolved to meet students' desires and expectations for meaningful global training experiences while expressing our commitment to help our international partners respond to inequities in health care access.

### **Ethics in Global Health Learning**

[Penn's partnership programs](#) in Brazil and Madagascar illustrate ethical dilemmas that can confront students working on global health projects and suggest a need to reconsider how institutions like ours select sites and prepare students for ethical dimensions of global health learning experiences.

*Brazil.* Because projects are designed to be short-term and to accommodate students rotating on and off, the sustainability of care interventions can be compromised when personnel are unfamiliar with patients' language or when there is a breakdown in

communication among rotating personnel. Our efforts to obtain data on clinical outcomes of Brazilian children exposed in utero to the Zika virus, for example, illustrate the importance of using native language speakers to obtain informed consent. As inhabitants of the region of Brazil in which Penn partners have limited formal education, and thus limited awareness of infectious agents and their potential impact on human development, native language speakers have critical roles to play in consent processes and in presenting test results to parents. Allowing only trained health professionals to conduct clinical testing and community outreach was also important, as was engaging local health professionals in extending the benefits of research to patient-subjects in other regions of Brazil.

*Madagascar.* A student project in Madagascar to enhance surgical and obstetric care illustrates the importance of matching students' educational priorities with a host institution's resources and priorities. Malagasy hospital administrators and clinicians questioned medical missions and research projects that ended abruptly, were not mutually beneficial, were wasteful, or fomented corruption in their institution. This example underscores that outcomes should solve practical problems, not just answer academic questions, and that visiting trainees should operate according to norms and expectations established by both local regulatory bodies and community advocates. Most importantly, immersion experiences should only be initiated after trust has been established with host partners and where sustainable and lasting bilateral relationships are developed.

### **Restructured Global Health Learning**

Penn's curricular approach is to match student immersion experiences to the distinctive needs of the host site both to minimize unforeseen ethical concerns in project implementation and to maximize benefit to the host institution and local health care practitioners. Penn's restructured curricular approach has 4 foci:

1. To direct pre-clinical students to biomedical research or public health activities that are first requested by and then vetted by host institution faculty.
2. To ensure, whenever possible, that students rotating through project sites are embedded within teams and supervised either by a qualified Penn or host physician.
3. To conduct comprehensive ethical and technical training for all prospective global health students, review their motivations and expectations, and raise awareness of the host environment and its social and cultural context.
4. To objectively monitor the benefits of global training experiences and the burdens they can place on host environments.

Incorporating these changes into our curricular restructuring plan reduced the number of clinical training sites from 50 in 2008 to 22 in 2018. Thus, despite growing demand for

global health experiences, fewer Penn students participated in offsite clinical rotations. To enhance the bi-directionality of our partnerships with host institutions, Penn now requires that, whenever possible, Penn students' immersion experiences include students from the host institution. We believe that this approach makes students more culturally sensitive and better prepared for global engagement and that it facilitates more productive outcomes in our collaborative work. During the time we have been restructuring our clinical partnerships, the number of Penn students in research-oriented global partnership rotations has more than doubled, as has the number of students from international host institutions conducting clinical rotations at Penn. Restructuring has enabled us to expand global health engagement without compromising ethical standards.

### **First Do No Harm**

The examples described in this article suggest a need for defining mutually beneficial program goals and being transparent with partners during program development and implementation about the limits of abilities of students who, regardless of their prior experience or devotion to global health, are not licensed to practice medicine or conduct research independently. Students might not have skills to interact appropriately with patients in limited-resource settings and might occupy high-demand clinical training slots that otherwise would provide training opportunities for host-region students. This latter point is especially important, as the success of global health efforts should be measured in part by the increase in quality training programs and trainees at partner institutions. There is great value in expanding global awareness through global health experiences among junior clinical colleagues, but the principle *primum non nocere* should be at the forefront of all global health training programs.

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## MEDICAL EDUCATION

### How Should Academic Medical Centers Administer Students' "Domestic Global Health" Experiences?

Sural Shah, MD, MPH

#### Abstract

Academic medical centers (AMCs) promote educational benefits to students of immersive global health experiences (GHE), both abroad and locally in low-resource settings. Within the United States, these opportunities are called *domestic* GHEs and often take place in student-run indigent care clinics (SRCs) that serve vulnerable populations. Domestic GHEs offer perspectives on the health care system that are similar to those of GHEs. In both, AMCs must balance benefits to students and patients against the potential risks of inadequate supervision and mentorship. This article reviews the roles of AMCs in preparing students for domestic GHEs with a focus on SRCs.

#### "Domestic Global Health"

Academic medical centers (AMCs) promote educational benefits to students of immersive global health experiences (GHE), both abroad and locally in low-resource settings.<sup>1,2,3,4</sup> GHE participants are more likely to pursue careers in primary care and other areas of medicine that focus on the needs of vulnerable patients.<sup>5</sup> GHEs are also highly valued by trainees.<sup>6,7</sup> Within the United States, these opportunities—which are called *domestic* GHEs—often take place in student-run indigent care clinics (SRCs), serve immigrant and other [vulnerable populations](#), and are staffed by attending physicians who supervise medical trainees, including preclinical students who tend to be responsible for clinic management and organization. SRCs are popular because they offer students opportunities to gain early clinical experience with serving patients from diverse backgrounds<sup>8</sup> and to be exposed to systems-based perspectives on social status, public benefits eligibility, and health care financing that influence individuals' and populations' health status in the United States.<sup>9</sup> However, AMCs must balance benefits to students and patients against potential risks of inadequate supervision and mentorship. This article first describes SRCs and relevant guidelines for GHEs. The article then explores AMCs' roles in preparing students for domestic GHEs with a focus on ethical questions arising in SRC care settings.

### Care Standards in SRCs

Similar to global health care delivery settings, SRCs generally aim to address gaps in health service delivery and focus on patients facing barriers to access. SRCs provide limited access to medications, diagnostic testing, and interventions but are often available after hours, typically in rented or donated spaces.<sup>10</sup> SRCs serve patients from ethnically diverse backgrounds with both chronic and acute illnesses. A nationwide survey of 59 SRCs found that 31% of patients were Hispanic and 31% were black/African American, with 36% of visits being for acute care and 33% for chronic disease management.<sup>10</sup> Additionally, SRCs and other free clinics frequently serve populations with limited English proficiency.<sup>10,11</sup> These patients can be ineligible for health care coverage based on immigration status.

Students staffing SRCs face ethical questions that are also raised in resource-limited settings abroad: What should I do when available resources limit my capacity to deliver standard of care to patients? When, if ever, is it ethically acceptable to offer less than standard of care to a patient? Should I—and how should I—communicate standard of care differences to patients in SRCs?

In contrast to formalized predeparture, on the ground, and postdeparture training and mentorship offered to students in GHEs, students in SRCs may lack formal guidance.<sup>12,13</sup> As GHEs have become more common, ethical questions, particularly about students practicing unsupervised or beyond their capabilities, have been formally addressed.<sup>14</sup> In 2010, leaders in global health education initiated the Working Group on Ethics Guidelines for Global Health Training (WEIGHT) to help address graduate medical education development.<sup>15</sup> The WEIGHT guidelines emphasize that well-structured programs should be planned collaboratively (between host and sponsoring institutions) and that students and trainees are responsible for communicating transparently with mentors and patients about their levels of training and experience.<sup>15</sup> These guidelines have been used by AMCs in development of curricula,<sup>16,17</sup> including dedicated global health tracks with simulation programs and web-based modules that review clinical, cultural, and ethics content.<sup>18,19,20</sup>

### Curricular Guidelines for Domestic GHEs

A challenge for AMCs is [applying lessons learned in international experiences](#) to domestic experiences, particularly longitudinal ones, with vulnerable populations. Building on lessons from global health training, teaching should include preexperience orientation, ongoing mentorship, and postexperience debriefing. Table 1 offers guidelines for domestic GHEs.

Phase	Guidelines
Preexperience	<ul style="list-style-type: none"> <li>• Review expectations and responsibilities of clinic leadership, faculty, trainees, and academic medical centers.</li> <li>• Review the supervision model and expectations for appropriate supervision standards.</li> <li>• Review standards of professionalism and cultural humility.</li> <li>• Establish language capabilities and supports.</li> <li>• Review the curriculum—including clinical, ethical, and social considerations—that is specific to the population served.</li> <li>• Review safety concerns.</li> </ul>
During the experience	<ul style="list-style-type: none"> <li>• Provide effective supervision and regular mentorship by designated faculty for clinical care and with regard to ethical issues.</li> <li>• Establish a forum for feedback and dialogue regarding ethical concerns and moral distress.</li> <li>• Identify opportunities for advocacy.</li> </ul>
Postexperience	<ul style="list-style-type: none"> <li>• Collect and evaluate data from trainees, faculty, and the community on the experience, its impact, and challenges encountered.</li> <li>• Provide formal feedback to trainees on clinical performance, cultural humility, and professionalism.</li> <li>• Debrief with trainees regarding ethical concerns and moral distress.</li> <li>• Provide ongoing mentorship to trainees interested in pursuing a career with vulnerable populations domestically.</li> </ul>

Table 2 presents a sample curriculum with an ethics component for students taking care of patients who are immigrants.

Topic	Content Areas
Clinical	<ul style="list-style-type: none"> <li>• Utilize evidence-based resources and guidelines for the clinical evaluation of immigrant patients.</li> <li>• Recognize the role of trauma, acculturation, and postmigration stressors in the lives of immigrants.</li> <li>• Provide trauma-informed care when appropriate.</li> <li>• Recognize caregiver burnout and apply strategies to address secondary trauma.</li> </ul>

Access	<ul style="list-style-type: none"> <li>• Direct immigrant patients to health care coverage and services for which they are eligible based upon their immigration status.</li> </ul>
Community-based partnership	<ul style="list-style-type: none"> <li>• Identify strategies to meaningfully partner with community-based organizations serving immigrant communities to improve immigrant health, including those involved in the provision of legal services, mental health care, social services, community building, and education.</li> </ul>
Culturally and linguistically appropriate care	<ul style="list-style-type: none"> <li>• Identify and apply resources to enhance communication with patients with limited English proficiency, including using interpreter services, and gain comfort providing linguistically and culturally appropriate care that takes into account health literacy and familiarity with the health system.</li> </ul>
Policy and advocacy	<ul style="list-style-type: none"> <li>• Demonstrate knowledge of the impact of US immigration and health policy, both current and historical, on the health care needs of immigrant populations.</li> <li>• Identify strategies for advocating for immigrants and health policy reforms.</li> </ul>
Social determinants of health	<ul style="list-style-type: none"> <li>• Apply a strategy to screen for social determinants of health.</li> <li>• Recognize common legal issues facing immigrants based on their immigration status.</li> <li>• Understand how to effectively and responsibly partner with legal organizations on immigration-related issues, including by forming medical-legal partnerships.</li> </ul>
Ethics	<ul style="list-style-type: none"> <li>• Establish a forum for trainees to provide feedback and engage in dialogue on ethical concerns and moral distress.</li> <li>• Develop and apply an ethical framework for common challenges faced in the care of low-income immigrant patients.</li> </ul>

Surveys of medical education programs have shown that topics related to domestic GHEs are often included in global health curricula.<sup>21,22,23,24</sup> Given that participants in GHEs are more likely to care for patients who are immigrants,<sup>23</sup> this approach seems reasonable. However, given the popularity of domestic GHEs such as SRCs and the prevalence of vulnerable populations in the United States, many trainees will care for patients in these populations without having participated in a global health track. AMCs

should, therefore, consider introducing all trainees to instruction in caring domestically for vulnerable populations.

### **Ethics and Cultural Humility**

As in GHEs, the concept of cultural humility and Beauchamp and Childress' ethical principles can help trainees respond to ethical questions. Cultural humility encourages openness and—in contrast to cultural competency, which focuses on education about “typical” cultural practices—emphasizes approaching each individual patient as having a unique identity. Practicing cultural humility requires lifelong [commitment to self-reflection](#) and patient-centered dialogue to identify each individual patient's values and priorities.<sup>25</sup>

Beauchamp and Childress' 4 well-known principles include nonmaleficence (avoidance of practices that are unjustifiably or unnecessarily harmful), beneficence (the obligation to work in the best interest of a patient), respect for autonomy (expressing respect for a person's self-determination, including by disclosing information needed for a person to make a decision), and justice (typically understood as requiring fair resource allocation).<sup>26</sup> Cultural humility, however, can also be understood in terms of justice, as it requires transparency and cultivating awareness of historical, social, and cultural situatedness of systemic inequality.<sup>25</sup> Cultural humility and the 4 fundamental principles of bioethics are useful guides in discussing common ethical challenges in domestic GHEs, such as resource allocation and advocacy, transparency and partnership, the hidden curriculum, and systemic inequities.

*Resources and advocacy.* Learning in resource-limited settings may prompt some to conclude that it is ethically acceptable to provide lower quality care with less privacy to patients living in poverty.<sup>8</sup> For example, if a trainee sees patients with poorly controlled diabetes and observes a mentoring physician delaying insulin initiation due to its high cost, that trainee could interpret this behavior as ethically unproblematic, given the totality of the patient's circumstances.<sup>27</sup> Alternatively, a trainee could consider if there are other methods of providing the standard of care, such as referral to other safety net programs. Additionally, situations in which trainees feel they must act in a way that is unjust or counter to their sense of what is ethically permissible cause moral distress.<sup>28</sup> Trainees can advocate for health-system changes that would improve access to care,<sup>29</sup> which might ameliorate their moral distress. To assist in advocacy, the American Academy of Pediatrics publishes information on immigration policies<sup>30</sup> and an advocacy toolkit.<sup>31</sup>

*Transparency and partnership.* In resource-limited settings, clinicians are often asked to make difficult decisions among treatment options based on price and access. For example, trainees might be tempted not to reveal to patients that they are being given substandard care because standard care costs too much for their setting. Or they might

choose to discuss all treatment options with patients, even those that seem financially untenable, thus allowing patients to be aware of potential harms and ultimately to determine their own care. In global health settings, trainees should be taught to consider both individual patient and community voices in managing and administering SRCs. It is key that domestic community members are involved in decision making to ensure that an SRC meets patients' needs.<sup>16,17</sup>

*Hidden curriculum and teaching compassionate care.* As in international GHEs,<sup>32</sup> there is concern that some students learn that it is acceptable to practice their skills on those living in poverty.<sup>8,32</sup> Accordingly, some trainees might withhold from patients (or from themselves) that, due to inexperience, they could be practicing in ways that violate the principles of nonmaleficence and respect for patient autonomy.<sup>12</sup> One survey of GHE participants showed that 48% felt it was acceptable to bypass standard of care guidelines in developing countries.<sup>32</sup> These responses suggest that students must cultivate recognition of their own limitations and that some are not adequately prepared to navigate ethical questions about what patients in resource-limited settings deserve from them. Students' lack of awareness and preparation can have important consequences, ethically and clinically, for patients in SRCs.

Clearly, educators can model and teach compassionate care. Educators, for example, should use evidence-based guidelines to teach how to care for patients who are immigrants,<sup>33,34</sup> and teaching in SRCs should model cultural humility in caring for patients with limited English proficiency.<sup>35</sup> Best practices in teaching care management extend beyond teaching clinical medicine, however. For example, for patients who are undocumented immigrants facing the threat of deportation, detention, or family separation, information can be provided on legal partners who can help them seek immigration relief or plan for the care of children in the event of detention.<sup>35,36</sup>

*Systemic inequality.* SRCs do not address pervasive systemic barriers to health care access for patients they serve.<sup>28</sup> In order to counsel patients with limited resources, trainees must understand the US health system enough to help patients navigate their options. For example, undocumented immigrants are generally excluded from publicly funded health coverage, with key exceptions in specific states and in the case of some emergencies.<sup>37</sup> Recently arrived legal permanent residents are also excluded from federally funded health coverage.<sup>37</sup> Trainees must be aware of patients' coverage options (or lack of them) or how to refer them to others who can provide this information. Trainees should also understand that patients who are able to adjust their immigration status (eg, by obtaining asylum or legal permanent residency) tend to be eligible for more services. Thus, trainees should know how to refer immigrant patients to legal partners who can advise them about eligibility and next steps. Domestic GHE training should also emphasize learners' acquisition of knowledge about safety net options that can address patients' needs, such as public hospitals, federally qualified

health centers, and Emergency Medicaid to cover life-threatening conditions for patients whose immigration status makes them ineligible for traditional Medicaid.<sup>37</sup>

## Conclusion

Given students' increasing interest in caring for vulnerable populations (eg, immigrants) domestically, AMCs have the responsibility to provide domestic GHEs, just as they do GHEs. This article has discussed ethical challenges in these settings and how AMCs can prepare students to meet them. In particular, it suggests the importance of ethics education in developing service-learning experiences that improve health care access for patients and support trainees responsibly.

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## POLICY FORUM

### How Should Public Health Schools Help Meet Millennium Development Goals in Latin America?

Taryn Clark, MD, Julia Terle, MD, and Robert H. Gilman, MD

#### Abstract

The Millennium Development Goals (MDGs) are a set of 8 aims adopted by the United Nations to create a more peaceful, prosperous, and just world. Four MDGs directly concern public health, and public health schools should be involved in meeting them. The Johns Hopkins University-directed Fogarty Global Infectious Disease Research Training Program in Peru and Bolivia, funded by the Fogarty International Center of the National Institutes of Health, has spanned nearly 3 decades and provides a case study of how low-resource interventions can help meet MDGs.

#### Millennium Development Goals

The Millennium Development Goals (MDGs) are a set of 8 international goals outlined in the United Nations (UN) Millennium Declaration of September 2000,<sup>1</sup> which all UN member states and over 20 international organizations have agreed on.<sup>2</sup> They are a coordinated effort to embrace a shared global vision of “a more peaceful, prosperous and just world”<sup>1,3</sup> and are designed as a “pledge to uphold the principles of human dignity, equality and equity, and free the world from extreme poverty” by 2015.<sup>3</sup> The goals are broad and range from promoting gender equality by empowering women to fighting communicable diseases such as HIV/AIDS and tuberculosis.<sup>4</sup> While some of the MDG targets had been met by 2014, others were far behind, especially in low- and middle-income countries (LMICs).<sup>3</sup>

Public health plays a direct role in 4 of the MDGs: eradicating extreme hunger and poverty, reducing child mortality, improving maternal health, and combating HIV/AIDS, malaria, and other diseases.<sup>4</sup> It also plays a supporting role in the remaining 4 goals. However, public health professionals were not heavily involved in the creation of the MDGs,<sup>5</sup> and the role of public health institutions and schools in actually meeting the MDGs has not been well defined.<sup>5</sup> The First International Conference on Sustainable Health Development, held at Tehran University of Medical Sciences in 2016, found a “great need of reconsidering the role of academic public health institutes in the context of low-middle income countries to respond to the emerging challenges of public health.”<sup>6</sup>

Public health schools have a large role to play in meeting MDGs, and many are helping LMICs improve their responses to extreme hunger, maternal health, childhood mortality, and [infectious diseases](#). However, we know of no comprehensive review of how global health programs at public health institutions are working towards the MDGs. Based on our experience in public health, we are aware that upper-income countries' public health schools often devote educational resources to their own students and perform small-scale projects or support modest capacity building in LMICs. Anecdotally, these interventions are common, and they are not very effective in helping LMICs meet the MDGs, given their limited scope.

There are effective alternatives, however. As a case study, we will explore the Johns Hopkins University (JHU)-directed Fogarty Global Infectious Disease Research Training Program in Peru and Bolivia, with which the authors are affiliated. This program has had a significant impact on the public health networks of these countries, enabling them to better meet MDG targets.

### **Case**

The JHU-directed Fogarty Global Infectious Disease Research Training Program in Peru and, more recently, in Bolivia, funded by the Fogarty International Center of the National Institutes of Health (NIH), provides a nearly 30-year case study of how public health schools contribute to the realization of MDGs. It demonstrates how relatively low-resource interventions can make large changes in a country's public health network and its ability to meet the MDGs. The JHU Fogarty program began working in Peru in the 1990s; at the time, the country was locked in an internal conflict with a Maoist terrorist group, Shining Path, which hampered both educational and outreach projects and caused a huge internal refugee problem.<sup>7</sup> Here, we describe the program's focus on training, empowerment, and shared knowledge.

*Training.* The program first focuses on training, which has grown in scope and reach over the past decades. It began by recruiting passionate researchers in the field of neglected tropical diseases, with a specific emphasis on women and minorities in Peru and Bolivia. Later, the program decided to send select researchers to the United States to receive their PhDs, deliberately offering the opportunity to those who had a vested interest in returning to their communities in an effort to limit [brain drain](#). About 95% of the Peruvian and Bolivian researchers who trained with the program still work primarily in Peru or Bolivia as prominent, internationally recognized public health researchers. The network associated with the JHU Fogarty program has grown exponentially. Trainees are now studying for MPH and PhD degrees at the Universidad Peruana Cayetano Heredia in Peru (UPCH), one of the JHU Fogarty program's partner institutions. They are under the supervision of scientists who trained in the program decades ago. In addition, associated faculty have administered 5 NIH training grants in Peru and Bolivia in collaboration with local universities. These grants have allowed training to take place where it is most

sorely needed, including in tuberculosis-testing laboratories in Bolivia and in neurocysticercosis clinical trials in Peru.

The program has also developed capacity-building initiatives, ethics training, and review boards. Four years ago, the program was instituted in Bolivia, using a south-to-south approach. Bolivians are learning laboratory techniques and pursuing graduate degrees at UPCH. The south-to-south approach keeps researchers and activists in their communities, which helps to build local technical and institutional capacity at home as well as to address the disparities between rural and urban health that are more prominent in LMICs. In addition, training in ethics resulted in the development of 4 institutional review board committees, 2 at the university level and 2 in hospitals. Before the program's engagement in Bolivia, there was no such ethics board in Santa Cruz, the largest city in Bolivia.

*Empowerment.* The JHU Fogarty program empowers new researchers by giving responsibility to young and talented trainees at the beginning of their careers. This delegation of responsibility encourages researchers to rise to the occasion and inspires them to develop their own ideas. Scientists come away from the program with self-confidence and a sense of independence that augments their own projects. Eventually they become proficient researchers with labs and research groups of their own. They then continue the mission of training curious and passionate researchers, influencing generations of scientists and facilitating the growth of the program. There are now at least 8 laboratories in Peru headed by graduates of the program.

*Shared knowledge.* Finally, the JHU Fogarty program focuses heavily on information sharing. It believes and teaches that research is shared curiosity and encourages the free and generous exchange of ideas, information, and data, even in today's cutthroat world of publications and grant applications. For example, faculty members hold monthly laboratory meetings that are open to any interested party and regularly attended by researchers from around the world. This value of openness has taken root in many of the trainees, who continue to collaborate freely in an unusually collegial public health network. Sharing information and supporting other labs allows cutting-edge technology and information to be brought to those who need it most.

*Additional factors.* The JHU Fogarty program's approach to training, empowerment, and shared knowledge has been bolstered by 2 concrete principles: dedication to place and interaction between trainees from the United States, Europe, and Latin America. In-country buy-in of projects is augmented by faculty dedication to the local community. Most faculty members live and work in Peru or Bolivia, which allows them to be not only physically but also emotionally available for mentorship.<sup>8</sup> American and European trainees are generally asked to spend a year or more in Peru and Bolivia, and Peruvians and Bolivians training in the United States are similarly asked to spend a significant period of time there. These long-term interactions, facilitated by many trainees living

together in dedicated housing, provide a unique advantage: because the scientists who compose the research teams are from multiple countries, they contribute diverse knowledge to the program. Several US and European scientists now do research permanently in Peru and Bolivia following their early-career training experiences, while one Peruvian has a US-based research career. In short, the interactions between Bolivian, Peruvian, European, and US scientists is synergistic. Relationships built in training last for years, strengthening international public health networks.

One reason the JHU Fogarty program focuses on training, empowerment, and shared knowledge is that it is making a conscious effort to address the structural inequities within a public health network that can otherwise marginalize researchers based on their race, gender, or class. This focus is in line with the UN [Sustainable Development Goals](#), which expand on the MDGs by addressing underlying structural inequities.<sup>9,10</sup> This focus also provides an additional framework for addressing public health problems and, along with the research undertaken by the program, recognizes the need to address social determinants of health and injustices within public health systems. Such interventions and research can help mitigate social determinants of health.<sup>11</sup>

The development of a strong public health network is integral to meeting MDGs. Biomedical research, pilot projects, and implementation and assessment of programs are key to addressing the public health crises behind many of the MDGs, including the reduction of communicable diseases and improvement in childhood mortality. The JHU Fogarty program has demonstrated the efficacy of this approach multiple times in Peru and Bolivia. Over the past 30 years, it has had many notable successes. Colleagues developed a new, rapid test for multidrug resistant tuberculosis; discovered new disease-causing organisms, including *Cyclospora cayetanensis*<sup>12,13</sup>; and started the first high-level tuberculosis testing lab in Santa Cruz, Bolivia. One of the program's first trainees, Hector Garcia, led a team to eliminate cysticercosis, a parasitic disease which can cause seizures, from an entire Peruvian region; he is one of the world's foremost experts on cysticercosis and is the recipient of multiple NIH grants.<sup>14</sup> Another former trainee, Manuela Verastegui, is part of a team testing novel drug compounds and a diagnostic test for Chagas disease, a parasitic cause of heart failure.<sup>15</sup> Other projects have included childhood nutrition, water safety, HIV treatment, early autism diagnosis, climate change effects on glacier-dependent watersheds, and lung diseases caused by open fires. These research projects and the capacity building associated with them have strengthened Peru's ability to meet MDGs.

### **Similar Approaches**

The JHU Fogarty program is not unique. Within Peru, a similar Fogarty program in collaboration with the University of Washington has also made a significant and lasting impact on the Peruvian public health network<sup>16</sup>—including by training the current head of the public health school, Patricia Garcia, at one of the top medical schools in the country. These 2 long-standing Fogarty-funded training programs have had a significant

impact on the research environment in Peru, resulting in a more than 9-fold increase in published papers over the last 2 decades.<sup>8</sup>

Governmental and private sectors in Peru have also taken measures to improve public health training. In the last year, an independent PhD program was started at UPCH in order to extend the benefits of training to those who do not have strong English skills or the resources to go outside the country to train. In addition, the Peruvian government has now instituted its own funding for both in-country and external training. At the JHU Bloomberg School of Public Health, there are 4 PhD trainees and graduates funded by the Peruvian government.

The United Nations Children's Fund endorses a similar approach, stating that more effective progress can be made with a focus on providing training, resources, and capacity building to partner nations.<sup>17</sup> The International Conference on Sustainable Health Development suggested facilitating the exchange of scholars and researchers among different academic public health institutes as well as nurturing collaborative research on similar problems in countries within a region,<sup>6</sup> similar to what the JHU Fogarty program does already.

### **Lessons from the JHU Fogarty Program**

Although emphasizing training, empowerment, and shared knowledge has been successful in South America, we cannot guarantee that this approach will have similar results across different countries and cultures. Without considering a country's institutional and cultural environment, there is a risk of global health partnerships further deepening health inequity.<sup>17</sup> However, this approach should have a positive effect on public health in most circumstances. We can advocate for more in-country training grants and for institutions in upper-income countries to offer more scholarships for international students who pledge to return to their communities for a previously agreed-upon period. These funding mechanisms hold promise to help combat the brain drain that disproportionately affects low-income countries. In addition, we can encourage the empowerment of women and junior colleagues by promoting them to positions of leadership early in their careers. Collaboration and the free sharing of information among research networks and countries are essential for progress to occur.

In addition, global health curricula at public health schools need to place more emphasis on building in-country training programs and dedicating more time to health promotion-related projects. Instead of focusing on students' participation in short-term research projects, we could encourage students to explore capacity development or joining an ongoing, long-term research project. Collaboration with local co-investigators on research projects would not only improve the capacity and the sustainability of the project but also add an important dimension of cultural competency. Long-term research projects, such as those associated with 5-year Fogarty program training grants, have greater impact than shorter projects. In short, more emphasis could be placed on

sustainability and capacity building and less on medical and research tourism masquerading as participation in necessary research projects.

### Meeting MDGs

Numerous avenues exist for successfully meeting MDGs, but doing so will take an intense and multidisciplinary effort. However, it is undeniable that public health schools can help the world meet MDGs through building public health networks and local research capabilities. Through the application of the specific interventions discussed here, other public health networks could be strengthened and in turn help their own countries and regions meet MDGs. The JHU Fogarty training program and similar programs have proven that emphasis on training, empowerment, and shared knowledge can have a significant impact on a public health network that can motivate eventual attainment of MDGs.

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## MEDICINE AND SOCIETY

### Is Updating the WMA Physician's Pledge Enough?

Ben Bowman and Brian Callender, MD

#### Abstract

Changes made in 2017 to the World Medical Association Physician's Pledge strive to keep in step with geopolitical trends by addressing respect for patients' dignity and autonomy and respect among colleagues. Health professions students should continue to proactively insist on patient care, research, and advocacy efforts that uphold human rights and the principles of beneficence, nonmaleficence, justice, and respect for autonomy regardless of a patient's origins or locale. US students should enter clinical encounters, both domestically and abroad, with cultural humility but should hold institutions accountable for ethical violations committed or observed during immersion experiences. As part of global and cultural humility, students should also remain cognizant of their privileged position as international observers.

#### Physician's Pledge and Immersion Experiences

In October 2017, the World Medical Association (WMA) General Assembly made key changes to its Physician's Pledge. To the 2006 declaration addressing human rights and civil liberties, it added language on respect for the autonomy and dignity of the patient and a clause about respect between colleagues.<sup>1</sup> These additions are timely in light of the global ascendance of authoritarianism and the concomitant rise in human rights abuses over the past decade.<sup>2</sup> Then- WMA President Yoshitake Yokokura stated that the additions focus "more on important ethical principles not in the current version and not expressed explicitly."<sup>1</sup> Students of the health professions from across the globe should use these additions to the WMA Physician's Pledge as a robust foundation for their individual efforts in providing local patient care and conducting research when participating in international immersion programs.

How the pledge is interpreted will vary based on individual and geopolitical context, especially with respect to the infrastructure in which health care is provided. Regardless of location, all health professions students should insist on considering patients' autonomy, human rights, and civil liberties as vital aspects of clinical encounters, professional decision making, and patients' health and well-being. For students from the United States, this commitment means international patient care should not differ from provision of domestic standard of care with exceptions for local differences in resource limitations and respect for cultural diversity. Offering professional and ethical care of a

high standard irrespective of international borders is a crucial opportunity to master, model, and advance culturally appropriate care. The opportunity to do so is also a privilege—one that should be considered, protected, and, most importantly, used to prevent the erosion of human rights and civil liberties. Toward that end, students should prioritize participation in advocacy and research that upholds and reinforces the values of the WMA Physician's Pledge.

### **Respecting Patients' Autonomy and Dignity**

The WMA General Assembly added the line "I WILL RESPECT the autonomy and dignity of my patient" to its 2017 Physician's Pledge.<sup>3</sup> Addition of this ethical principle was made in the context of a regress in global human rights over the past decade.<sup>4</sup> Consolidation of local political and global economic power in several large authoritarian nations<sup>5</sup> has contributed to this relapse, and the rise of ethnocentric nationalism also plays a role.<sup>6</sup> The addition to the Physician's Pledge suggests awareness of these changes and strengthens the profession's commitment to providing a global high standard of patient care. While the global medical community has paid significant attention to Ebola in the Democratic Republic of Congo, Zika in Latin America, and air pollution in many industrial and industrializing countries, less medical attention has been devoted to the concomitant suffering of civilians, journalists, and activists in Syria, Yemen, Afghanistan, Myanmar, Russia, Guatemala, and China. Proactive involvement in [crises affecting human rights](#) and civil liberties directly relates to respect for autonomy and dignity and should accompany attention to traditional health issues. Professional groups such as Physicians for Human Rights provide a framework for physician involvement in advocacy and research that addresses this gap.<sup>7</sup>

The WMA Physician's Pledge rightly discourages use of health professions expertise to violate human rights and civil liberties.<sup>3</sup> Passive avoidance, though, is a poor excuse for beneficence. Such a practice is akin to limiting health care to secondary and tertiary prevention. Our efforts should not just *not* violate human rights and civil liberties but should proactively support the use of medical knowledge to protect and advance them.

### **Fulfilling the Updated WMA Physician's Pledge**

*Clinical work abroad.* Respect for patient autonomy and beneficence are not like visas, limited to certain passports and forbidden from crossing certain borders. As presumably universal ethical principles, they transcend borders. As such, [domestic advances in human rights](#) and civil rights should provide momentum for international health progress. US students should express the intention of following, and should model their behavior on, the Physician's Pledge when learning in international settings. In clinical encounters overseas, students should treat patients with the same respect, afford them the same autonomy, and abide by other ethical principles that they would draw upon when practicing in their own country. Domestic standards vary internationally, and students can refer to the [Hippocratic Oath](#),<sup>8</sup> the Physician's Pledge,<sup>3</sup> and the Universal Declaration of Human Rights<sup>9</sup> for guidance.

Practical application of these principles can seem daunting to students, so we offer some suggestions. Students should decline to participate in so-called medical tourism—a term suggesting that international patients are mere objects of education or even entertainment for leisure travelers—or programs that do not conform to the standards outlined above, and they should also discourage others from doing so. When abroad and involved in patient care, students should respectfully elicit and consider perspectives of their host-community colleagues and supervisors on ethical issues, recognizing that cultural differences and resource limitations can inject ethical complexity into clinical encounters and community or colleague interactions. Additionally, students should conscientiously note the promulgated policies and actual practices of their host organizations.

Without fail, patients' human rights and civil liberties should be integral parts of clinical encounters and professional decision making. Taking these into account means (1) ensuring adequate translation services, (2) guaranteeing respect for autonomy and informed consent, and (3) demanding institutional accountability. Learning opportunities that do not observe these standards should be identified as unethical, interrogated from an ethics perspective, and improved for the better as soon as possible.

Transparency, accountability, and cultural humility are also important. Students should seek to clarify their role in international immersion experiences before departure, upon arrival, and in each encounter. Bidirectional accountability between institutions should be established to ensure that expectations are appropriate. Expressing global and cultural humility and responsibly and skillfully responding to ethical pluralism are essential skills for health professionals, especially those practicing in global settings. If conducted justly, international health care work can be an enriching training experience for all stakeholders.

*Advocacy and research.* The scope and focus of student research outside students' countries of training is underinvestigated. Anecdotally, since students often work as research assistants under host-nation or home-institution mentorship and oversight, their global health research has predominantly focused on understanding and preventing disease, and their ability to direct a research agenda is limited. Some students seek participation in research on global health education, infrastructure, and access. The possibility of partnering with willing mentors who [engage in research](#) that can inform human rights advocacy, global health ethics, and global health care policy and that can contribute to illuminating neglected topics is readily overlooked. Informed, pertinent, and cooperative inquiry not only is consistent with the WMA's Physician's Pledge to respect colleagues and share knowledge and expertise but also might be a way for international medical students to contribute to upholding human rights and civil liberties when outside their home countries.

As with patient care, students can advocate for—and should only participate in—research that adheres to the standards mentioned above and the World Health Organization’s Code of Conduct for Responsible Research.<sup>10</sup> When conducted ethically, student scholarship can catalyze conversations, shape dialogue, and build evidence that supports local patients and host-nation clinicians as well as human rights and civil liberties. Fruits of collaborative research should be a foundation for advocacy. As has been argued in the United States, collecting evidence is the most scientific way to approach advocacy, and blocking evidence building has been employed to obstruct progressive policy formation and implementation.<sup>11</sup>

### Conclusion

Recent additions to the WMA Physician’s Pledge clarify ethical duties of health professions students and clinicians and provide explicit support for all patients’ dignity and autonomy. These additions should be reinforced by clinicians’ promoting human rights and civil liberties. Specifically, health professions students everywhere should act both domestically and internationally to express respect for patient autonomy, uphold beneficence, defend justice, and practice cultural humility. In domestic and international settings, to the safest extent possible, students should use their voices to hold institutions accountable for violations to human rights or civil liberties that undermine respect for patients’ dignity and autonomy.

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**MEDICINE AND SOCIETY**

**Are Patients' and Communities' Poverty Exploited to Give Health Professions Students Learning Experiences?**

Harold W. Baillie, PhD and John F. McGeehan, MD

**Abstract**

In clinical settings, exploitation of patients who live in poverty can be exacerbated when health professions students' educational goals are overemphasized relative to patients' and communities' needs. Continuity of care relies on health system infrastructure and its capacity to keep patients engaged. Achieving just health care delivery in domestic and international settings requires balancing students', patients', and communities' interests. This article examines how students' interests in learning should be considered relative to patients' and communities' interests in receiving quality care.

**Who Is Served?**

Poverty is often misunderstood as simply an economic standard, such as an income level below which a person or family is defined as impoverished. From a health care perspective, this standard overlooks another barrier to accessing care: culture. In wealthy (and thus generally more educated) communities, a physician can generally assume that patients will appear on time for appointments, that advice will be understood and followed, and that access to tests, prescriptions, and follow-up care is readily available. But such assumptions are problematic in impoverished areas. Although opportunities for students to gain clinical experience by participating in care delivery in impoverished areas can be rewarding and eye opening,<sup>1</sup> there are also concerns about patient exploitation,<sup>2</sup> especially in regions where populations not only face cultural barriers but also do not have adequate access to health care or rely on clinics with student caregivers.

We argue that though accreditation standards have been established, health needs of patients living in poverty raise social justice and practical questions about which students should be aware. First, students should be informed about their patients' social, cultural, and environmental realities and not just their clinical symptoms. Second, to address patients' clinical vulnerabilities and ensure the adequacy of their own education, students need clinically qualified and socially adept mentors who can guide them in offering effective care that is within their scope of practice and level of training. We suggest that achieving just health care delivery in impoverished settings, both domestic and international, requires a team-based approach to facilitate continuity of care.

### **Existing Standards**

The [Liaison Committee on Medical Education](#) (LCME) is the United States Department of Education-recognized accrediting body for programs leading to the MD degree in the United States.<sup>3</sup> One LCME standard relevant to delivering care in impoverished settings is that students cannot work independently.<sup>4</sup> Each patient must be seen by a licensed physician who accompanies a student who sees the patient. This requirement is intended to protect both student and patient and to help ensure that clinical care offered by students is not exploitative, even given the limits of a student's skill level. However, it could still be possible to exploit patients by giving students responsibility beyond what their training and experience warrants, in contravention of LCME standards. Although LCME standards also address cultural competence,<sup>4</sup> medical education needs to explicitly link cultural competence to global health in the curriculum and to take an interdisciplinary approach to these topics.<sup>5</sup>

### **Standard Care**

Clinicians are obliged to deliver standard of care, typically defined as the level and type of care a reasonably competent and skilled health care professional with a similar background and in the same community would provide under similar circumstances.<sup>6</sup> This standard requires comparison of apples to apples, so care given to uninsured patients in a free clinic should be compared to care offered in clinics delivering similar care and not to care offered in, say, a major academic medical center. Likewise, care offered in another region of the world should be fairly compared.

*Domestic context.* Limited resources mean that care standards are not the same in free clinics and in academic medical centers; at times, care considered substandard in one health service delivery context is reasonable in another. For example, the Emergency Medical Treatment and Labor Act (EMTALA) is a legal requirement for hospital emergency departments to stabilize patients, but this minimum obligation does not apply to outpatient settings.<sup>7</sup> When patients who do not have health insurance are discharged, they might misunderstand discharge instructions, have trouble accessing prescribed medications or recommended foods, or have trouble accessing or attending follow-up appointments for outpatient care.<sup>8</sup> These obstacles mean that inpatient or emergency care might have only temporary value. In global situations, similar obstacles can be exacerbated by a lack of health service infrastructure. Tension between inpatient and outpatient care standards, particularly in impoverished communities, reveals how poor people can play important roles in educating students and trainees about the effects of scarcity and poverty on health status and health outcomes.

*Global context.* The American College of Physicians (ACP) offers guidance about how to protect both students and patients, locally and globally.<sup>9</sup> But, in our view, the ACP's emphasis on mitigating power imbalances and on respectful partnerships treats cultural

differences mainly as a challenge to students' preparation for international immersion experiences and not as influencing their responses to a patient's health status or their understanding of a health problem or what to do about it. We further suggest that the ACP's emphasis on distributive justice<sup>9</sup> is too limited. Both continuity of care for the individual and for the population is needed, and these obligations should be embodied in how we structure the education of students.

### **Team-Based Immersion Care**

Given that cultural and economic factors affect access to and utilization of health care in impoverished regions of the world, students should learn to offer continuity of care in [team-based approaches](#) to health care service delivery. Educating students in ethics and health justice requires helping them recognize complex interconnections among clinical, social, cultural, and ecological health determinants. A team-based approach to navigating these interconnections is intended not just to oversee students' performance and progress but to respond with care to the needs and vulnerabilities of patients in resource-poor settings.

By *team*, we mean individuals who work together to improve health outcomes in individual patients and entire communities. Because teams should be able to respond to the needs of a patient with a specific disease, coordinate follow-up care, and facilitate access to needed interventions, they might include certified interpreters, social workers, pharmacists, nurses, and physicians, for example. Practicing medicine well in resource-poor settings requires technical skill, clinical knowledge, and well-developed capacities for listening and empathy. Getting to know patients in a longitudinal relationship and as members of a community provides clinically and ethically relevant insight that can help trainees respond more fully to concerns raised in a specific encounter.<sup>10</sup> Such immersion experiences can motivate more complete care of patients and more informed career choices of students and can help balance learners' and patients' interests.

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**HISTORY OF MEDICINE**

**Volunteer Service From American Physicians During the Vietnam War**

Kelsey Walsh, MA

**Abstract**

This article draws on resources from the American Medical Association Archives on the Volunteer Physicians for Vietnam Program (1966-1973) to consider benefits and costs of immersion opportunities in medical education. Selected images and reports illuminate how such programs can influence both physicians-in-training and the environments in which they are immersed.

During the Vietnam War, South Vietnam faced a dire shortage of physicians serving civilian populations, since Vietnamese physicians were ordered to serve in military hospitals to care for soldiers. In the Volunteer Physicians for Vietnam (VPVN) Program (1966-1973), funded by the United States Agency for International Development and administered by the American Medical Association, US volunteer physicians on 60-day tours served in 31 of 43 provincial hospitals,<sup>1</sup> with the support of 3 military medical officers, an administrative officer, and 12 enlisted men at each site. The Vietnam War placed serious health burdens on civilians, and VPVN answered South Vietnamese authorities' requests for volunteers to serve in areas with the most urgent need.

**Figure 1.** Joanne Smith T. Examines a Child



Courtesy of the American Medical Association Archives.<sup>2</sup>

Offering medical care to South Vietnamese civilians, volunteer physicians served 2-month tours and received \$10 per day in compensation; round-trip transportation; funding for and aid in securing passports, visas, and World Health Organization-recommended immunizations; and a \$50 000 all-risk insurance policy. In the years that VPVN operated, 774 US physicians served 1,029 60-day tours with nearly 18% choosing to do another tour. Joanne Smith T. of Atlanta, Georgia, served a 2-month tour and then requested to stay an additional month to continue operating weekly clinics and providing care to patients in the Da Nang Civil Hospital. She later returned to Vietnam with the Christian Health Services to continue her work.

**Figure 2.** William Funderburk Teaches Children to Use a Stethoscope



Courtesy of the American Medical Association Archives.<sup>3</sup>

[William Funderburk](#), a surgeon from Washington, DC, served a tour at the Da Nang Surgical Hospital. General surgeons, general practitioners, pediatricians, and public health specialists were in highest demand. Volunteers saw up to 100 patients in a day, and VPVN placed high value on educating Vietnamese physicians, surgeons, and nurses to continue caregiving after VPVN volunteers went home.

**Figure 3.** American Physician Treating a Young Man Wounded in the War



Courtesy of the American Medical Association Archives.<sup>4</sup>

Despite ongoing war, volunteer physicians served in hospitals not subject to regular military action. American physicians earned respect from the South Vietnamese people not only because they arrived at the request of the South Vietnamese government, but also because they treated both civilian and military patients.<sup>1</sup> VPVN participants treated illnesses and conditions rarely seen in American hospitals. Some common causes of death in South Vietnam during the war were malaria, tuberculosis, meningitis, typhoid fever, intestinal parasitism, and a wide range of war wounds caused by mines, artillery, and booby traps. Volunteer physicians also routinely encountered trachoma, leprosy, dysentery, and nutritional disorders.

**Figure 4.** Robert Maher, Ophthalmologist, Examines a Child



Courtesy of the American Medical Association Archives.<sup>5</sup>

Robert Maher was first assigned to Vinh Long Hospital to provide ophthalmological care, but the Tet Offensive at the National Palace and the US Embassy in Saigon prompted his reassignment to Da Nang Hospital after only a few days. There, he performed 15 elective eye surgeries and trained the Vietnamese director of the hospital in surgical eye care. Maher recalled scrounging for eye instruments from several international naval hospital ships, since supplies he needed were not readily available in local South Vietnamese hospitals. Maher also assisted in repairing orthopedic, chest, and cranial wounds; performed amputations, major debridements, and craniotomies; and treated patients with cholera, plague, typhoid, and malaria.

**Figure 5.** An American Physician Works With a Vietnamese Nurse



Courtesy of the American Medical Association Archives.<sup>6</sup>

The *Journal of the American Medical Association* published a 6-year review of the VPVN Program in 1972.<sup>1</sup> Administrators collected input from American volunteers, Vietnamese physicians, and patients to evaluate the program's impact. Some responses from Vietnamese health professionals and students reflected frustration with VPVN volunteers who seemed to make little attempt to understand Vietnamese culture. Other Vietnamese clinicians reported feeling satisfied with guidance they received from VPVN volunteers. The 1972 review report suggested that a program in short-term medical aid should operate by providing **guidance, education, and assistance** when requested while allowing the host nation to fit volunteers into its overall health program. This review concluded that "within a limited area a well-conceived and preplanned program can result in a meaningful contribution to a country with limited health resources."<sup>1</sup>

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**ART OF MEDICINE**

**Anatomy of a Medical Student**

Fatimah Hafeez Choudhary

**Abstract**

A reductive linocut is created in progressive stages from a single block. Each color is printed on top of a previous layer, such that each cut is irremediable. This reductive linocut print is of a young woman's face with one side exposing what lies below her skin. The finality imposed by this medium offers an apt analogy to a medical student's first human cadaver anatomy dissection.

**Figure.** *Anatomy of a Medical Student*



**Media**

Reductive linocut print.

A reductive linocut is created in progressive stages from a single block. Each layer is carved and color is printed on top of the previous layer. The medium was invented by Pablo Picasso,<sup>1</sup> and it is aptly referred to as the “suicide print,” as it is virtually impossible to go back and recover from a mistake. Each cut is decisive, irremediable. When I first held scalpel to skin, I was doing dissection with fellow students, and there was tremendous pressure not to make a mistake. A broader ethical challenge for us medical students would be to pursue dissection while expressing respect for our cadaver’s humanity.

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#### Editor’s Note

This is the co-winning artwork of the 2018 John Conley Art of Medicine Contest.

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## PERSONAL NARRATIVE

### Voluntourism

Hannah R. Sullivan

#### Abstract

A rise in international medical volunteering (IMV) poses complex issues for organizations, clinicians, and trainees to navigate. This article explores ethical implications of IMV, such as scope of practice, continuity of care, and erosion of local health systems, and offers a personal perspective from a related field.

#### Imperialism and Medicine

British imperial writer Rudyard Kipling published a poem in *McClure's Magazine* in 1899 that Theodore Roosevelt described in a letter to Senator Henry Cabot Lodge as “rather poor poetry, but good sense from the expansion point of view.”<sup>1</sup> Taken out of context, parts of Kipling’s poem, “The White Man’s Burden: The United States and the Philippine Islands,” describe a thankless pursuit of humanitarianism: the white man is tasked with seeking profit and gain on behalf of others—feeding, healing, and pacifying them—even if they are resentful of his protection and aid. Taken in its entirety, however, the poem was meant to provide support for America’s waging the Philippine–American War by serving, as Foster and McChesney note, as one of the “ideological veils for a barbaric reality” at the time.<sup>2</sup> At an Anti-Imperialist League protest in Chicago in 1899, Jane Addams criticized pro-imperialists’ thinly veiled guise of beneficence: “to ‘protect the weak’ has always been the excuse of the ruler and tax-gatherer, the chief, the king, the baron; and now, at last, of ‘the white man.’”<sup>3</sup> The obvious assumption underlying this commentary is that, for imperialists, there is a lot more to be gained through imperialism than the “hate” and “blame” Kipling notes in his poem.

Today, Kipling’s defense of [imperialism](#) retains some support. Quoting Kipling in his book, *The Savage Wars of Peace: Small Wars and the Rise of American Power*, Max Boot encourages modern armies to take up a similar responsibility in the developing world.<sup>2</sup> And Niall Ferguson says of imperialism that “[n]o one would dare use such politically incorrect language today,” but “[t]he reality is nevertheless that the United States has ... taken up some kind of global burden” and “unfailingly acts in the name of liberty, even when its own self-interest is manifestly uppermost.”<sup>4</sup> In a more general sense, the poem and ensuing commentary represent the idea that the work one does to help others can serve the primary purpose of self-gain.

Although health care professionals provide expertise and services that are invaluable to society, they may nevertheless have something in common with imperialists: for both, significant ethical issues may arise as a result of expansion into new territories. According to David Welling et al, medical humanitarianism does “not always successfully accomplish our goals of providing safe, modern, successful, appropriate care.”<sup>5</sup> With this caveat in mind, this article will discuss international medical volunteering (IMV), ethical concerns that can arise in IMV and immersion experiences, and possible improvements in such cultural exchanges in the medical sphere based on a personal perspective from a related field.

### **Good Intentions**

Recognition that IMV is not necessarily beneficial to all stakeholders has become increasingly common in the media and in health professions research. For example, compare the satirical article, “6-Day Visit to Rural African Village Completely Changes Woman’s Facebook Profile Picture”<sup>6</sup> (describing a 22-year-old woman’s “completely transformative” 6-day trip to a Malawian village that she “just knew” would change her Facebook profile photo “forever”) with the following statements from Omnia Elnaway et al’s qualitative study.<sup>7</sup> The statements were given by 3 different British general practitioners following a 2-week program in which they acted as trainers for Nepalese health care professionals.

Overall, I think it had a very positive impact ... for me personally. I was able to just switch off my life back home and also to put things in perspective when I came back.

It was a real life change actually. It was ... really so provoking and [a] stimulating and scary experience.... I think in a way it made me confident and made me make decisions without back-up much more quickly. I think it made me rely on clinical decisions and actually made me bolder...

I did a course in expedition medicine earlier in 2009. That looked like something very interesting, to give me the opportunity to travel, giving me the opportunity to do some good for a charity.... How I would describe [my experience] ... very fulfilling and I would recommend it ... pretty much to any GP...

These quotations demonstrate that physicians participating in IMV experiences can focus more on [benefits to themselves](#) than to the people they are putatively helping. Although Welling et al suggest that health care professionals “who go on humanitarian missions are definitely engaged in a noble cause,”<sup>5</sup> they also identify “seven sins of humanitarian medicine” that tend to occur when visiting physicians try to help others. These include, among others, “failing to match technology to local needs,” “failing to have a follow-up plan,” “allowing politics, training, or other distracting goals to trump service” (even though the mission is represented as service oriented), failures in organizational cooperation, and “doing the right thing for the wrong reason.”<sup>5</sup>

### **Ethical Concerns**

*Scope of practice.* According to Irmgard Bauer, "It is difficult to define a medical volunteer other than as a person with a qualification in a health profession who decides to offer these skills on a voluntary basis to residents of resource-poor regions."<sup>8</sup> However, private volunteer organizations have also marketed "neglected health facilities as sites where foreigners can 'make a difference', regardless of their skill set."<sup>9</sup> Thus, ethical issues that arise in medical volunteering exist along a spectrum in terms of gravity and vary according to volunteers' qualifications. The idea of a "renowned hand surgeon" or "junior plastic surgery resident" performing a Furlow operation<sup>10</sup> could be, to some, less disturbing than an undergraduate performing unsupervised deliveries and unnecessary episiotomies.<sup>11</sup>

*Limited collaboration.* Although IMV programs tend to be cast as opportunities for collaboration between visiting health care professionals and their hosts, they can actually provide appropriate clinical opportunities for residents or trainees to the exclusion of local health care workers (who might be equally or more qualified).<sup>10</sup> The one-sided benefit of partnerships exists in other sectors as well; as a consultant at KPMG in Nairobi once said to me, "Why should an American be hired when there is a qualified Kenyan to do the job?" Bauer similarly remarks that "unsolicited 'help'" can hinder progress, particularly in "an existing local health system where locals' skills were improving and confidence in the system growing."<sup>10</sup> Furthermore, she notes that the "impact of western volunteers" can actually undermine local health strategies instead of supporting them.<sup>8</sup>

*Lack of continuing care.* Short-term programs incorporated into health professions education and offered during vacation may also be disruptive. Bauer states that such programs "focus on under- or post-graduate students' learning opportunities" and are popular among students with a "keen interest in surgical residencies."<sup>8</sup> These programs can result in harm to patients because participants do not have much skin in the game with respect to care quality and outcomes, as the nature of their work may shield them from any true responsibility. As Bauer explains, "unless a condition can be treated completely in one visit, volunteers are unable to provide continuity of care, await lab results that may take longer than at home, deal with any complications on location and, overall, cannot be held accountable for their actions."<sup>8</sup>

*Failure to foster independence and erosion of local services.* Bauer also identifies numerous ways in which IMV fails to create self-sufficiency in developing communities, "such as leaving locals with the product of pointless or questionable 'work', being a burden to the community, taking away local jobs, creating a dependency on foreign help, paralyzing local initiative or ensuring that locals remain firmly at an assumed level of helplessness to secure more volunteer placements."<sup>8</sup> Where a volunteer system supplants a local health system instead of supporting it, it may cause the local system to erode because volunteer health care can become so prevalent in a community that even people who can

afford to pay for services prefer to wait until free care arrives from overseas. Staff of local health care services notice “how patient numbers drop off when volunteers leave, modern treatment stops and drugs are running out.”<sup>8</sup> As a result, local patients do not form trusting relationships with local physicians and clinics, causing the system to erode and leading to underpayment and even unemployment of local professionals.<sup>8</sup>

### **Guidance**

There is no bright-line way to solve these issues, but professional medical organizations have made progress in the right direction. For example, in partnership with the Rwandan Ministry of Health, multiple US medical schools have joined the [Rwanda Human Resources for Health \(HRH\) Program](#), which began in 2012.<sup>12, 13</sup> The program seeks to address the shortage of health care professionals in Rwanda by increasing the number of faculty at the University of Rwanda’s medical, nursing, and midwifery schools.<sup>13</sup> Between 2012 and 2017, visiting faculty from US institutions such as Dartmouth and Harvard have spent anywhere from 2 to 12 months in the program annually, with approximately 55% of faculty staying for more than 6 months and approximately 52% returning at least once.<sup>13</sup> As Cancedda et al note, visiting and existing faculty and students collaborate on a “variety of training, research, and health service delivery activities” and “continuing professional development programs.” At the same time, “Rwandan faculty and students have traveled to the United States to give lectures, participate in clinical clerkships, and pursue further training, while others have presented their work at ... conferences.”<sup>13</sup>

According to the then-Rwandan Minister of Health, Agnes Binagwaho, “the Rwanda HRH Program represents a new model for health education and for the delivery of foreign aid”<sup>12</sup> that will create a framework for cooperation between international academic institutions. Significantly, the program is designed to be completely Rwandan run, and visiting faculty will phase out as they are replaced with top Rwandan program graduates. The program emphasizes ownership and sustainability such that the Rwandan government, in Binagwaho’s words, “will be positioned to sustain the improved health workforce on its own without foreign aid.”<sup>12</sup>

In offering general guidance for “humanitarian missions in the third world,” Christian C. Dupuis states that “[o]ne should never perform operations abroad that one would not do on one’s own private patients at home, and our residents should not be left alone to perform ... operation[s] if they are not allowed to do them unsupervised at home.”<sup>10</sup> Providing residents and students with opportunities to use the methods they have learned at their home institutions but have not been permitted to perform there may be counterintuitive to promoting better health for patients and to the broader goal of fostering [health care sustainability](#) in international communities through professional development. In addition, Bauer calls for “responsible guidelines for clinical student placements”<sup>8</sup> in increasingly globalized health settings, continuous and collaborative

development that builds on existing capabilities, and meaningful, long-term partnerships. Accordingly, international student or resident training programs should focus on students and residents learning alongside local clinicians and classmates who can offer unique perspectives or insights on medical practice in their area. Central to collaboration is true exchange—both cultural and academic.

### **A *Mzungu* in Kenya**

I am not a health care professional, but I can speak personally to the value of collaborative partnerships. After graduating from Indiana University and before returning to Chicago to study health care law, I was lucky to meet a generous family and a Kenyan researcher with whom they were associated. Having taken interest in their projects to construct a maternal health center and facilitate maternity services in Dandora, a community on the eastern border of Nairobi, I was offered an opportunity to assist with the administration of the newly minted program. When I arrived, I was welcomed by 5 Catholic sisters who graciously allowed me to stay in their convent for a few months. Although I never felt unwelcome, at the beginning, I felt somewhat out of place.

My feeling of being out of place is illustrated by an experience I had one morning while jogging. An elementary student I regularly saw on his way to school approached me with a puzzled look on his face and asked, “are you a *Kalenjin*?”—referring to the Kenyan ethnic group that produces most of the country’s elite distance runners.<sup>14</sup> Laughing, I told him I was just a *mzungu*—the Swahili word for white person or Westerners generally. Helmut Spitzer explains that the term has “manifold linguistic connotations and derives from the Swahili verb *kuzungua* which means ‘to go around’, thus ironically denoting the high level of mobility associated with light-skinned foreigners.”<sup>15</sup>

At the health center, my job was to draft standard operating procedures (SOPs) based on reports of the daily activities of health care workers and their departments, clinical and laboratory forms, and other administrative documents. At first, I was not very successful. Admittedly, the blank form and list of instructions asking each employee to disclose the details of his or her day may have been somewhat off-putting. After a few weeks, I grew concerned about my ability to develop the SOPs because I had not yet gained my coworkers’ trust in me or in my project more generally. Around the same time, I started to retain some Swahili and a kind friend purchased a dress from a local tailor for me. When I wore the dress to work, a coworker and I laughed together at the coworker’s ironic remark that he “barely recognized me!” Soon, people were visiting my office to make friendly conversation; small talk beginning with *habari yacko?* (Swahili for “Your news?” or “What’s up?”) often ended with more fruitful discussions regarding the SOPs. Others began to approach me with ideas for projects that I could assist in, such as service brochures for their departments. In making myself less of a stranger, I was happy to realize that my presence at the health center actually had utility.

However, this transition was not seamless. Like others, I am not entirely innocent when it comes to the “seven sins of humanitarian medicine.”<sup>5</sup> A particular example—while I was taking inventory and discussing SOPs with the laboratory technician—comes to mind and may be considered within Welling et al’s framework<sup>5</sup> as a failure to collaborate or to match technology with local needs. To prepare for a meeting with the lab technician, I began developing a few SOPs for certain sampling methods with which I was familiar from biology and neuroscience labs I had taken as a college student. I imagined that doing so would ease the process of altering them according to his personal preference, if need be. Excited to see the center’s equipment, I arrived a few minutes early and realized that a certain device that I had included in my SOPs was not there. Embarrassingly, my first thought was “Oh no, where can we get one? I’ll have to change the SOP...” and not “Oh, we don’t need one, what should I include in the new SOP?” Remembering the purpose of our meeting, we ultimately discussed the proper method to be included. However, I imagine that thoughts such as my initial one, when acted upon, can be disruptive or at least inefficient. In that moment, I learned a lesson about the importance of collaboration if I wanted to contribute anything of value to the health center in my time there.

### **Conclusion**

Although humanitarian aid is a noble cause, IMV can disrupt local life when volunteers or their organizational and institutional sponsors put their own needs before the needs of those whom they try to serve. Greater efforts at humility on the part of health professions training programs—specifically, recognizing local capacity and collaborating with local professionals—can create more just, respectful, and mutually beneficial exchanges. Participants in such programs should consider ways in which learning international practice methods can enrich their own knowledge instead of practicing outside of their scope. Clearer [ethical guidelines](#) on this topic might shore up nonaltruistic impulses to serve others while enabling health care practitioners to understand global conceptions of health.

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