

Global health and service learning: lessons learned at US medical schools

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Background: Interest in global health is rapidly increasing amongst US medical students. Many students aspire to incorporate global health into their future careers, while others seek international opportunities to better prepare themselves for domestic practice. US medical schools have begun responding to this burgeoning interest with varying intensity and through a number of different strategies.

Conclusions: Three important themes involved include: increasing the academic rigor of programming, fostering sustainable site partnerships, and encouraging mentorship and reflection for the students involved. Finally, the growing practice of service learning might also play a helpful role in integrating these themes into expanding global health programs.

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Interest in global health has burgeoned in the past decade. Increasingly, medical students not only express interest in global health, but many more actually participate in such immersion experiences (1). This has been well documented in the literature. Although many commentators laud the level of enthusiasm students have for this area of healthcare, many others also express some concerns. Worries have emerged that students are ill-equipped, poorly supervised, and take on clinical obligations that would not be acceptable in their home countries (2). Others worry that the exoticism of travel abroad seduces young medical students to commit valuable service time during their training when other challenging health disparities exist right here at home. Some of the articles we surveyed frame such immersion trips as volunteer efforts or ‘voluntourism’ and not as service learning opportunities (3). One of the authors (KP) of this essay, however, has argued that such experiences should be framed as important service learning opportunities and not just as volunteering efforts (4). Thus, in this essay, we wished to accomplish three things: (1) share the experiences of two of the authors, who are medical students at Loyola University Chicago Stritch School of Medicine, (2) learn what kinds of global health opportunities exist at a sample of allopathic medical schools, and (3) offer suggestions on how to improve the learning

experience for students while being attentive to important ethical considerations for the patients they are trying to serve.

Medical student narratives

The future global health physician (MS)

I still remember the moment I realized my future was going to be in global health. It was the summer between my first and second year of medical school at the Loyola University Chicago Stritch School of Medicine, and I was in the middle of an international service immersion trip to Guatemala. It had been a long day, and I sat along the side of the local hospital, reflecting on the patients I had met and the work we were doing. The degree of poverty we were facing was just so overwhelming. In fact, it was only matched by the incredible sense of gratitude nearly all the patients had, even if sometimes all we had to offer were a few packets of Tylenol. I am not sure I can explain exactly what happened next – something just clicked. I had entered medical school with high hopes and big dreams, and all of a sudden, it felt as though they were finally coming together into one clear and concrete vocation. It felt good.

The very next morning I asked our attending if I could ever come on another trip with her. Excited to hear I was interested, she told me she was actually headed to Peru

in another couple of months. Thus, just a few months after my introductory experience of global health in Guatemala, I was preparing for round two. This time I was only able to go for a week, but I had the opportunity to meet a few Peace Corps workers who were working in the community for the next 2 years. It was then, in witnessing their incredible language skills and tight connection with the local community, that I realized I would need to go beyond the standard short-term medical trip if I were to really make global health a substantial part of my future career.

Returning to medical school, I immediately began working with the newly created Center for Service and Global Health as well as my academic deans to try and put something together. Ultimately, thanks to an overwhelmingly generous attending who had started a clinic in rural Bolivia 10 years earlier and the incredible open-mindedness and flexibility of the Loyola administration, I was given the chance to spend a year working at the clinic in Bolivia.

Despite its ups and downs, that year provided me with what is probably the most powerful learning experience of my young medical career. In the short trips I had been on previously, I had been introduced to both the immense logistical and cultural challenges involved in delivering healthcare halfway across the world in a resource-poor setting. But, as I learned time and time again during my year in Bolivia, being aware of these challenges is far different than having actual and concrete experiences of how they happen and why. The answers were not always pretty, and I will admit there were times during the year where the sheer size of need in combination with the ethical complexity of determining how best we could help was simply too much. I will also admit that even at the end of my year, I still had far more questions than I did constructive solutions.

Thankfully, that was not the end of my story. During our fourth year at Loyola, we were given the opportunity to spend up to 2 months abroad. With this opportunity, I was able to spend 1 month at another clinic in the jungles of Peru as well as return to the clinic in Bolivia. This has given me the opportunity to not only learn from the contrasting example of another rural clinic, but also return to my original site after 8 months of processing and reflection.

It has been an absolute gift, and I could not imagine a more fitting bookend to the comprehensive global health training that Loyola has provided me. Like many other young medical students, I was given the chance to volunteer abroad in the summer after my first year, and the experience left me changed. However, through the focused mentorship and constant emphasis on personal reflection, I was inspired to go back and continue building on the experience. Then, with the seeds firmly planted, I was given the chance to go even further thanks to the courageous support of the administration which helped

me design a year-long global health fellowship position. And finally, through the continuing effort of the Global Health leaders at Loyola to solidify a standardized global health curriculum, I have been given the opportunity to bring meaning and closure to my many experiences by going back and reflecting more formally on what has happened and what I have learned.

Together, these experiences have left me changed – not only as a future physician, but also as a human being. And though I have no idea where my training will take me next, I know I would not have come this far if it had not been for the unique support Loyola has provided me. But, as I move towards a likely future in academic medicine with a focus on global health, it is my hope that students will continue to be offered these life-changing opportunities for years to come.

The accidental medical tourist (NR)

My interest in global health first surfaced at the University of Michigan where I studied Spanish with a pre-medical focus. As my knowledge of Spanish strengthened and the pressure of medical school applications approached, I often wondered how I could gain clinical experience while putting my language skills to use. When I learned about the global health initiatives on campus, all the puzzle pieces fell into place. Whatever the motivation may be, pre-medical students and medical students alike are drawn to global health, which has become a hot topic in the medical community. The incentives to participate in international service trips are big these days. The global perspective gained by participating in international mission trips is indispensable: understanding social determinants of global healthcare, cultural competency, and comprehension of public health issues. Although these are compelling reasons to join the global task force, they cannot be the only considerations academic centers have in mind when designing their global health programs. Many students will select a college or medical school based on the availability of a global health program; however, students need to probe deeper and evaluate the integrity of the programs instead. Though it is clear that students benefit immensely from participating in immersion trips, do we also need to ask what impact these trips have on the local community?

While at the University of Michigan, I participated in various global health programs and clubs to get exposed to this expanding field. I read about barriers to healthcare in Third World countries; I followed Paul Farmer's work trying to understand the intricacies of politics, geography, and culture and how these factors intertwine to limit healthcare efforts. As many of my fellow pre-medical students traveled abroad on medical mission trips, I was intrigued by their experiences but I could not help but feel that my contribution as a 'pre-med' would fall short of benefiting the parties involved. At the end of the day,

several thousands of dollars were invested in these trips per student, but at whose cost were the students ‘gaining global perspective?’ And while I do not want to undermine the importance of expanding one’s global outlook, it is imperative that global health programs formalize these immersion trips in an attempt to benefit all parties involved: students, patients, local communities, and academic centers. There is no doubt that many global health programs are created with good intentions, but without a thorough examination of implications of global relief work, many of them have the potential to do more harm than good. When programs neglect the involvement of the local community and fail to create bidirectional relationships, they also fail in creating sustainable, long-term healthcare that should be the foundation of every global health program.

This need for accountability materialized during my own global health trip to Quito, Ecuador with the International Service Immersion program (ISI) at Loyola’s Stritch School of Medicine. Over the past 18 years, the ISI program has worked to establish long-term relationships with established clinics and medical relief groups abroad. With only four students in its first year, ISI has grown dramatically with over 85 students participating this year. I applaud the program for its emphasis on public health and preventative health measures that is incorporated into every trip, along with its emphasis on reflection and research. But that same old feeling of incapability I had in college flooded my mind once again: what am I really contributing to this community in Ecuador? Certainly as a first-year medical student I could take a blood pressure and other vitals, but did my limited medical skills warrant an expensive trip to a foreign community with complex medical problems outside my scope of understanding? Sitting in this poor, underserved clinic, I wondered how many other college and medical students were in my same shoes, many of them lacking even the minimal language skills to communicate. These foreign clinics should not be the practicing grounds for inexperienced students. With the ‘preferential treatment of the poor’ model in mind, these patients deserve the utmost respect and quality of care. Despite my eagerness to help, I found it unjust to have this vulnerable community be my first patients.

The two students’ essays here reflect different experiences with global health immersion experiences. The first student is someone who is committed to this area as a career goal and found the experience transformative on many levels. The second is someone who has some interest in this area but came away with many more concerns about the appropriateness of such global health experiences. Both experienced challenges and triumphs as they embarked on their respective immersion experiences. As one of the student authors (NR) asked, ‘I wondered

how many other college and medical students were in my same shoes, many of them lacking even the minimal language skills to communicate.’ In light of these student narratives, we wanted to review a handful of US medical schools to see what kind of commitment they have to global health training and opportunities.

Global health opportunities

We took a small sample of US allopathic medical schools to determine what level of commitment they had with regard to global health. We chose schools that were recognized as having some commitment to global health. We chose two schools with religious affiliations (Creighton and Loyola), large private institutions (Duke, Harvard, Stanford, University of Pennsylvania, Case Western, Johns Hopkins, Boston University and the University of Miami), and large public institutions (Indiana, Minnesota, Washington). The schools were geographically diverse as well, with the East Coast, South, Midwest and West Coast, USA, all represented. Based on a review of the literature, we wanted to ask three broad questions: (1) Do medical schools require global health in the curriculum or offer them as electives? (2) Are there formal educational opportunities for medical students through fellowships or additional degree programs? (3) Do medical schools partner with other organizations to better promote global health? With these questions in mind, two of the authors (NR and MS) reviewed the websites of these schools to see what kind of global health offerings exist at each school.

With regard to the first question, a few schools do integrate global health in a formal way in their respective curricula. For instance, Indiana University offers first year students global health exposure in the introduction to clinical medicine course. University of Minnesota offers a formal global health curriculum for first and second year students. Even more schools offer some kind of elective curricula for their students: Indiana, Minnesota, Stanford, Case Western, Boston University, and University of Washington.

With regard to the second question, a few schools offer a fellowship track: Indiana, Minnesota, Stanford, and Case Western. Even more offered formal dual degree programs, combining the MD with a PhD that focuses on global health (Indiana, Minnesota, Stanford, Case Western, BU, and University of Washington). And these same schools offered a number of extended programs.

Lastly, with regard to the question of what kinds of partnerships exist between medical schools and other organizations, we learned that at least four schools have developed long-standing partnerships. Indiana, Minnesota, Stanford, Case Western and Boston University all reported such relationships. Lastly, our own institution (Loyola) has committed itself to more formal global health offerings. The International Service Immersion

(ISI) program is offered to all rising second year medical students, regardless of prior experience in global health. ISI serves as the foundational field experience upon which the formal Global Health Honors program builds. The Global Health Honors program is a formal curriculum that spans four years, requires 14 weeks of field experience, and provides co-curricular instruction through faculty-led didactic, online modules, and small group discussion. It also requires pre-travel ethical training and post-travel reflection and evaluation components. Each Global Health Honors student has a faculty mentor. The Honors program culminates in the presentation of a scholarly project borne out of the required field experience. Two students per year are selected to participate in a Fieldwork Fellowship between the third and fourth year of medical school; these students serve as the Global Health Scholars. The primary objective of the Fellowship is to serve as community health education coordinators and patient advocates for a Loyola partner clinic in Bolivia, while exploring professional paths in global service. The Center for Community and Global Health has other long-term partnerships with global sites for short-term student and faculty exchange, and is building partnerships with continual presence.

Improving global health service learning

Student experiences in global health are as varied and complex as the cultures and communities in which they serve. In addition, as the above two reflections highlight, the backgrounds and expectations of the students who participate are also incredibly diverse. However, despite these widely varying circumstances, there seem to be a handful of common practices amongst academic medical centers that have a particular focus on global health. But, of the 13 schools that were studied, there were few that had adopted the majority of these practices. Rather, it seems each had integrated a select few that best fit with their broader curriculum and academic focus. Nonetheless, three common themes seem to stand out.

Academic rigor

Student-driven interest in global health has ballooned over the past decade. In many ways, medical education has struggled to keep up. Given this, one of the most essential first steps for global health programs is to integrate the more traditional components of medical education into the unique context of global health. Some commentators have even developed formal global health ethics curricula (5). Just as an ICU rotation comes with clearly defined objectives, expectations and outcome measures, equally rigorous rubrics should be applied to global health experiences. Some schools currently offer global health tracks, or even year-long global health fellowship opportunities – both of which come with

formal lectures and research expectations along with academic credit and official recognition on student's transcripts. As one student (MS) experienced, transforming service trips into full-blown academic opportunities can be immensely complex, and often demands a great amount of courage and flexibility from the administrators and faculty involved. However, given that the majority of the 13 programs have already been able to develop such curricula, it remains a vital first step in the evolution of global health education.

Sustainable site partnerships

One of the greatest challenges for global health initiatives is bridging the gaps of geography, language and culture between the foreign hosting institutions and the in-country clinical sites. Though many different strategies have been tried with mixed outcomes, one central tenet seems to be an ongoing partnership between both parties that is based on a shared mission of service and education, and maintained through honest and open communication. There is no set way to do this, and the programs surveyed each seemed to strive towards this goal with differing (though often overlapping) strategies. Through such partnerships, students are given the chance to return to international sites multiple times at different stages of their training. For one student (MS), this provided the opportunity to learn from prior challenges faced and better prepare for a future career in global health. In addition, such permanent partnerships give credence to the concerns suggested by another student (NR), who worried about the long-term impact of still in-training students trying to see patients when they do not speak the language nor understand the culture. Though not without its difficulties, a long-term partnership can provide an opportunity for communication that can lead to potential solutions to these intrinsic challenges.

Mentoring and reflection

Even with increased academic rigor and the support of sustainable partnerships, ethical challenges within global health experiences are almost inevitable. From the student's perspective, they are exposed to a disorienting degree of need and poverty many have never encountered within a culture and community that is completely foreign to them. As for the recipients of care, arriving vulnerable and in need of care, they are welcomed by very young and light-skinned foreigners who fumble their names and seem to be just figuring out how to use their stethoscopes. Given these parameters, it should come as no surprise that ethical challenges arise (6). However, one student (MS) was able to work through many of these challenges with the help of multiple required reflections along with the committed mentorship of faculty involved. Such practices often fall under

the heading of ‘service-learning’ which emphasizes the reciprocal benefits that are possible when direct-service is integrated with mentoring and reflection. The work of faculty should be supported by their institutions, so that faculty can best help shape the service learning outcomes for their students (7).

Conclusion

Global health has emerged as a serious part of undergraduate medical education in the US. Students not only expect to have access to such educational experiences, but they also expect that they meet certain levels of rigor and sustainability. Moreover, the need to more formally articulate such experiences as more than simply volunteer efforts but as valuable service learning opportunities is clearer than ever. Through student narrative and by examining the offerings of a handful of US medical schools, we hope to further highlight the need to more formally integrate global health in the education of medical students.

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