

ORIGINAL RESEARCH

Beyond Visas and Vaccines: Preparing Students for Domestic and Global Health Engagement



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Abstract

At campuses across the United States, scores of students are embarking on global health experiences in low- and middle-income countries. The desire to improve the health of poor communities while preparing for future health careers is often the main driver. The spotlight on domestic health issues also has fueled a resurgence of interest in underserved communities in the United States. Regardless of the destination, rigorous preparation is needed to ensure that the students' presence benefits the communities they aim to serve.

Development of mutually beneficial programs with host communities coupled with thoughtful preparation of students is essential to the future of these university programs but, more importantly, to achieve the goal of shared learning and capacity building across borders. US program leaders may not fully consider the potential risks that can occur to their programs from involving poorly prepared students, or these risks may appear largely theoretical. However, many experienced practitioners and their international collaborators can relate examples of damaged partnerships, adverse consequences on community structures, dangers to patient safety, and harmed professional reputations and credibility. Domestic health experiences do not require a visa or vaccines but bring students in contact with many of the same ethical, professional, and cross-cultural challenges as overseas endeavors.

Fortunately, best practices for preparing students to confront these challenges have emerged from years of experience in domestic and global contexts alike. It all begins with establishing institutional partnerships built on principles of reciprocity and respect. Through careful program design, universities can align missions, goals, and expectations to best serve all invested parties: local partners, students, faculty, staff, and the communities where they will be working. A second critical component is appropriate student selection. Matching student skills with partner needs can optimize benefits for both the host organization and student. Finally, universities can prepare students to navigate in cross-cultural settings in a professional and ethical manner through careful training.

Just as negative experiences can have lasting negative consequences, the best ones can lead to strengthened partnerships; durable benefits for local and global communities; and optimal learning for students, their supervisors, and hosts.

KEY WORDS domestic health, global health, predeparture, training, health equity, international health, orientation, partnership

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INTRODUCTION

Global health has become a highly popular area of study for students in health-related fields at both the undergraduate and graduate levels. A growing attention to health disparities and a desire to improve the health of poor communities often are the main drivers of such student interest. Impassioned students and trainees are now clamoring for both additional global health coursework in their formal curricula and for opportunities for mentored overseas clinical, community health, and research experiences. For many considering future careers in health, a global health experience has become a presumed rite of passage for students, who now view a term, or summer, or year working in global health as requisite for admission to medical or graduate school. Many prospective applicants now include the option for international training or the presence of global health tracks as a criterion for ranking their colleges; medical, nursing, or public health schools; and residency programs.^{1,2}

In the constant competition to attract the best students, academic institutions across the country continue to expand global health programs to meet this growing demand. In 2010, 37% of medical schools reported offering global health content, and this number has grown every year.³ At universities, global health programs feed into a growing trend of internationalization of the undergraduate curriculum and of experiential learning.⁴ Recent attention to global health programs in the lay press, spurred by advocacy from various Hollywood celebrities, has pushed global health into mainstream media and discourse. Global health also responds to the desire of today's altruistic youth to take part in making the world a better place. As Dr. Mike Merson, a global health expert based at Duke University, observed "Global health, particularly because it brings to light such gross disparities between low- and high-income countries and populations within countries, is a natural channel for student compassion and action."⁴ As a result of this confluence of factors, each year, scores of students embark on global health experiences in low- and middle-income countries (LMICs) across the world, predominantly in Africa and Asia, and to a lesser extent in Central and South America. Indeed, more than one-third of incoming medical students report having an international volunteer experience before entering medical school.⁵

Applications for participation in these programs indicate how competitive they have become; in

some cases, as much as 25% of the student body applies.⁶ At our own institution, we have witnessed this groundswell of interest in global health experiences among our students at both the undergraduate and graduate levels. Applications to our Global Health Internship program,⁷ open to both undergraduate and medical students, have increased more than five-fold since its establishment in 2006. Each year, applications outstrip the number of opportunities we have available by several orders of magnitude. In addition to growing our global health internship opportunities from 4 slots in 2006 to a peak of 26 in 2015, in the coming academic year we are launching a health equity track open to medical students and internal medicine residents. Residency programs throughout the United States, including those at Dartmouth, are rapidly establishing global health activities to accommodate demand for such programming.

Domestic Health Equity Programs: Global Health Comes Home. Although not always as popular among students, programs to address domestic health equity issues also are commonplace on academic campuses.⁸ Some of these programs predate the global health movement by decades; at Dartmouth such programs—then referred to as community service programs—have been available to undergraduate and medical students since the 1980s. These programs range from clinics providing free care to medically indigent populations in urban and rural areas, to programs that provide assistance with the health care needs or health education of recently resettled refugee or at-risk immigrant populations, to public health campaigns in lower socioeconomic neighborhoods to reduce smoking, obesity, drug use, and other unhealthy lifestyle habits. Well-designed domestic programs offer students an opportunity to achieve similar experience in addressing complex health and public health issues as is available in international programs, and the added benefits of longitudinal, multiyear (vs. 4–12 weeks) involvement and, depending on the number and capacity of community partners, the potential for all interested students to participate.⁹

For some students, these experiences lack the exotic appeal of a dramatically different culture and setting. Our experience has shown that both global health and domestic health equity work are extremely challenging and highly rewarding. In fact, we remind our students that there are more similarities than differences to working with underserved populations regardless of where they reside. The common themes of understanding context

and culture, the challenges of working with under-resourced services and systems, and of the need to work through strong community partnerships are foundational to both global and domestic health programming. In recognition of the important crossover in this work, many global health programs, ours included, have begun to offer domestic placements in Native American communities and organizations serving refugee populations.

The Effects Of Increased Demand: Taking Our Partner's Perspective. The explosive growth of global health programs in the United States (US) and other high-income countries (HICs) has created parallel demand for new opportunities for work with partners in LMICs. Although many view this increase in demand among our students as a positive phenomenon—reflecting more students desiring to work with underserved communities to tackle the many complex issues of health care delivery in these settings—we need to consider the effects of this demand on our international partners. As Kerry and colleagues noted, the growth that we have witnessed on the US side in the form of newly established centers, institutes, and programs for global and local health training and internships is not necessarily being matched by an increase in capacity within our international partner institutions and organizations.¹ Consequently, we may be placing an even greater burden than previously on our community partners and their ability to accommodate our students and trainees.

Many educators have underestimated the burden that sending our US students and trainees overseas imposes on our international partners. Through years of managing reciprocal exchanges, we have learned how time intensive it is to orient an incoming student to a new health care or public health system, a new professional culture and living environment (and the students coming to Dartmouth all have sufficient English-language ability, so there is no need for the use of translators, which may be an added task in other universities).

Yet when we send a US student overseas, too often the assumption is that the student, by providing “free labor,” will be an overall asset to the partner. After all, isn't the student bringing needed skills, be they technical, analytical, organizational, or computer-based? Didn't we select the most confident, articulate, and organized applicants during the application and interview process whose success in our US academic system will carry over to this experience? Won't their abilities as bright, critical thinkers and active problem solvers allow them to

successfully navigate their new environment in a low-income setting? After more than a decade selecting students for global health experiences, the answer to these questions is a resounding no.

Preparing Students: Beyond Visas And Vaccines. Global health programs have been developed at a rapid rate with a focus on recruiting top student or residency candidates and accommodating their training needs. It is unclear if institutions have paid a similar level of attention to developing the necessary predeparture preparation for their students. Predeparture preparation should serve to:

1. Ensure that students are safe during their global health experiences;
2. Maintain academic rigor and optimal learning; and
3. Provide the student the most meaningful experience possible and an understanding of the “bigger picture” of the project or work in which they are engaged.

Furthermore, predeparture preparation can help to ensure that the experience is beneficial (and not burdensome) to the international partners hosting the student. Identifying projects and managing the logistics for such experiences can be quite time and labor intensive. However, if we focus only on the visas and vaccines associated with the global health experience, we miss important opportunities for global health education, partnership building, and project progress. And although this may be more obvious for international placements, we know that students engaging in domestic health programs also need and will benefit from similar preparation. Mistakenly, because such work does not require a visa or visit to travel clinic, these students are often not included in the pre-departure training offered to students embarking on global health experiences. It is time to close this gap.

The Consequences of Getting It Wrong: Risks to Students, Partners, and the Partnership. If something goes wrong in this work, the stakes are higher than we might imagine. Sending ill-prepared students to work with underserved populations can cause harm to both the sending and the receiving institution. For years, our colleagues in LMICs have graciously accepted our students despite the strain that hosting and supervising them can place on existing resources and the diversion of limited faculty and staff time toward orienting and bringing the students up to speed on the project or the workings of the public health or medical system in the country. Nearly half of respondents in a survey of hosts at clinical sites in Sub-Saharan Africa reported

decreased efficiency when precepting foreign students.¹⁰ Time spent teaching and training our students may be worthwhile for the individuals involved and affect their careers, but any time it replaces the teaching of local students and trainees—who are likely to spend their careers working in that system, not just 1 or 2 months—the overall value of the program must be questioned. In many LMICs with a high disease burden, medical faculty are already stretched to capacity and university faculty-to-student ratios are well below those of their US partner institutions.¹ In such settings, time for teaching students is already a precious commodity. Stretching this capacity even further with additional students seems an unfair burden to place on them.

Although we may select the best and the brightest among our US student body for these experiences, rather than strengthening weak institutions, the presence of foreign students can disrupt fragile education and health care ecosystems by sidelining local professionals and residents.¹¹ US students sometimes experience the resource constraints for patient care as a lack of caring among the local health care team and, with the best of intentions, push for additional testing and an intensity of care that they believe their patients would receive in the United States but do so without knowledge of the effects on actual patient outcomes or healthcare delivery systems. Similarly, students engaged in public health and community outreach activities may seek solutions that do not take into account the broader national and community contexts. Examples include performing health education under the assumption that lack of knowledge is the only barrier to behavior change, or raising expectations for services that local institutions are unable to provide.

Unprepared students and trainees also can negatively affect institutional partnerships. International collaborations, like any professional relationship, require constant attention and good communication to ensure needs are being met on both sides. Partnerships between LMICs and HICs often carry the additional complications of a legacy of Western colonization and a power imbalance from an unequal distribution of resources. Sites receiving financial support from an international collaborator may feel an obligation to host its students or an inability to express concern with their performance.¹² Many cultures outside the United States demonstrate greater respect for hierarchies of age and professional standing. Students who are inadequately prepared for their experience may unknowingly show disrespect and offend their international

supervisors or the local health care team. Some allowances are made to foreign students being unaware of local practices, but when a student prioritizes meeting his or her project goals over respecting and preserving professional relationships, it can jeopardize the whole partnership. Regrettably, on more than one occasion in the early days of our program, we had to intervene to remedy a threatened partnership from an overzealous student's efforts to achieve his or her project objectives. Of course, these kinds of misunderstandings and inappropriate approaches are not restricted to students—faculty and staff who engage in global health programs can make the same missteps if not properly prepared. Program leaders have a responsibility to ensure that all involved in this work are given adequate training and an introduction to the context in which they will be working.

Ideally, these programs are structured to satisfy the needs of both the students and the populations and colleagues at the international partner sites. Most of the time, our international partners have not complained about the burden that receiving our students places on their staff or educational system—either because they have grown accustomed to being the training ground for foreign students who have the means to travel for a service project or overseas training, or because no one has ever asked them about it. A recent study conducted by Evert et al surveyed 35 faculty, staff, and community members from institutions and organizations in 17 countries that host visiting undergraduate and graduate students and trainees to better understand perspectives on competencies, learning objectives, and interactions with visitors.¹³ Although the data are preliminary, hosts reported that only 20% of visiting students/trainees were well prepared, and 21% were evaluated as less than satisfactorily prepared. One-third of respondents suggested that 35% of trainees did not demonstrate an understanding of the realities of working and living in a low-resource setting. Additionally, one-third felt that students took away more than they could give to the community where they worked and very few (10%) felt that the student gave more to the community than they themselves gained. A study by Lukolyo and colleagues of preceptors of students engaged in short-term experiences at clinical sites in Sub-Saharan Africa reported similar findings.¹⁰ Although preceptors generally regarded students favorably, respondents expressed concerns around some learners' professionalism, cross-cultural skills, and understanding of the local conditions. These

findings are among the first formal reports from international hosts (a telling fact by itself) and provide a baseline against which to measure improvement in this area.

Students themselves can also suffer consequences from poor preparation before their global health experience. Student safety should always be a top priority. Accordingly, perhaps driven by liability concerns, student health and safety has been the mainstay of predeparture preparation for students heading overseas. But beyond the malaria prophylaxis and traveler's diarrhea precautions, the mental health and well-being of our students during their time overseas, and especially upon their return, has been underemphasized. Poorly designed programs may have adverse consequences on students, who struggle afterward to manage their stress.¹⁴ We have observed the challenges of the "re-entry phenomenon" or reverse culture shock when students try to integrate back into campus life. Many find their friends and family have a hard time understanding exactly what they experienced, and the typical student quandaries and challenges seem superficial or insignificant in comparison to the true hardship they witnessed overseas. At the same time, inadequate preparation and post-return reflection may cause students to jump to conclusions about the root causes of the challenges they witnessed in the LMIC where they worked. Some programs are now focusing on this important part of the student experience to ensure a safe and healthy conclusion follows.^{15,16} These programs can provide effective models to emulate.

Although this discussion focused on the risks encountered in international settings, we emphasize that they are no less serious in domestic health settings with similarly underserved and vulnerable populations. These local experiences do not require passports or prophylaxis but are no less fraught with the same institutional, social, and cross-cultural challenges as those overseas.¹⁷ Moreover, many students are increasingly interacting with the same populations they would have previously encountered abroad but now as newly arrived immigrants and refugees, often as they navigate a HIC health and social services system.

Prioritizing the Partnership: Shifting the Paradigm. Experts in global and domestic health programming have long recognized the importance of building durable partnerships in the communities where they work in order to be effective. However, achieving balanced and equitable collaborative relationships is complex and requires a paradigm shift

in how global and local health programming is conceived and conducted. Under this new paradigm of making the partnership central, our health programs as well as the preparation for our students must be restructured to reflect this shift. In recent years, several global health experts have developed guidance to help program directors develop comprehensive predeparture programs to ensure ethical engagement of students and trainees.^{11,18} The Working Group on Ethics Guidelines for Global Health (WEIGHT) established guidelines for best practices in global health programs based on their collective experience.¹⁸ These guidelines urge sending and host institutions to organize programs in line with local host priorities to maximize benefits to the receiving institution.

Beyond mutually beneficial collaborations, consensus is emerging on the need to situate student global health experiences within a broader agenda of building local LMIC capacity and health systems. This shift parallels a larger movement in global health away from vertical programs narrowly focused on a single disease and led by foreign partners to more locally driven initiatives to build and strengthen health systems. Cancedda and colleagues cited programs such as the Medical Education Training Partnership Initiative, the Nursing Training Partnership Initiative, the Rwanda Human Resources for Health Program, and the Global Health Service Program as examples that apply a more comprehensive approach to building health workforces in line with partner priorities and disease burdens.¹⁹ This shift has forced a broader reexamination of academic partnerships and programs designed largely to benefit short-term trainees from high-income settings. Kerry and colleagues call for an approach to global health education that invests explicitly in in-country leadership, health systems, and research capacity.¹ Reflecting this trend, Melby et al proposed four guiding principles for the development of short-term experiences in global health:

1. skills building for participants in cross-cultural effectiveness and cultural humility;
2. bidirectional participatory relationships that create opportunities for both sending and host institutions;
3. local capacity building; and
4. long-term sustainability.¹⁰

The WEIGHT guidelines challenge academic institutions from HICs to move beyond models limited to opportunities for their own students.

A clear lesson from both global and domestic health is the centrality of longitudinal, institutional partnerships to lay the foundation for successful student experiences.²⁰ Global health experiences embedded in partnerships designed to address locally identified community and health system needs yield greater benefits to hosts and trainees alike. At our institution, student global health experiences are one component of broader partnerships that, based on local priorities and needs, often encompass capacity building and training in-country, faculty and student exchanges, and shared research activities. Situating student experiences within this existing framework of reciprocity allows closer alignment of student activities with partnership goals as well as more optimal use of resources at host institutions. Where possible, student projects are designed to fit within the scope of existing activities of the partnership. For example, students have served for many years as research assistants in ongoing clinical trials being conducted with our partners in Tanzania. Incorporating these students into formal partnership activities has shifted some of the burden of supervision to our own faculty while supporting our joint research goals.

As firm believers in reciprocity at our institution, we have established bidirectional exchange programs of students and faculty as a core programmatic activity. Each year, we partially or fully fund and host roughly 7 to 10 students and trainees from 3 to 4 partner sites. Bidirectional exchanges, we have learned, take significant resources on the part of clinical costs and administrative staff. Early in our exchange program, faculty members lamented the additional work associated with hosting students unfamiliar with our medical system and training. Over time, these same faculty members have come to appreciate the burden that our students place on their hosts.

Identifying areas where students can support partnership or host priorities can mitigate many of the pitfalls of student global health experiences. Many students bring skills—an ability to write effectively in English, knowledge of data analysis programs such as SPSS or STATA, and an ability to organize large amounts of information—that can provide significant value to their hosts without displacing local trainees. Students may assist with ongoing research collaboration, assist partners with manuscript or policy writing in English, or conduct background research. Students' ability to dedicate time to research and other projects can both help

to advance programmatic goals and can contribute to career development for individual hosts. Through careful program design, academic institutions can align missions, goals and expectations of student global health programs to best serve all invested parties: local partners, students, faculty, and the communities where they will be working.

Selecting and Preparing Students. Selection of qualified candidates who can fulfill supportive roles in their placement is critical to the success of collaborative partnerships. Matching student skills to project needs, rather than defining projects around student interests, is essential. Equally important is identifying candidates whose attitudes predispose them to thrive in a global health setting. Ventres and Wilson highlighted the critical importance of open mindedness, humility, generosity, patience, and excellence to the success of students' global health experiences.²¹ Conversely, they identify attitudes reflecting arrogance, entitlement, and lack of sensitivity to institutional or cultural context as impediments to successful experiences. Programs can design the selection process to screen for these qualities. At our own institution, we include questions in our written and interview questions to assess cultural humility, flexibility, and emotional maturity. Students are asked to describe how they have negotiated academic or work issues in the past. Here, global health programs have much to learn from the domestic service learning community and social justice movements, which have long stressed the importance of participant attitude in approaching communities of difference.²²

Local hosts should have an important role to play in the selection of students, although they often are not consulted. Many can identify the skills and qualities that will be most useful on a project in a particular environment. Involving them in the selection process also helps to minimize feelings of being imposed on by the sending institution. In our program, we routinely solicit host input both in the development of candidate requirements and selection through participation in review of applications or interviews via video or teleconference with program finalists.

Critical to their effective functioning in a partnership, students must also be prepared for the ethical and cultural challenges they will face in their work and in their host country. Many universities have developed training programs in cultural competency and global health ethics, and resources such as the Ethical Challenges in Short-Term Global Health Training Course²³ are now available online. Equally important is the need to prepare

these students for the realities of working and living in a low-resource setting. Paradoxically, many of the personal qualities that have positioned students well for these opportunities—assertiveness, efficiency, and a desire to serve—translate poorly in institutional settings with strained resources, competing priorities, and complex hierarchies.

Even the best predeparture training, however, cannot prepare students for the myriad challenges they may encounter in their global health experiences. Instead, we must teach students to repeatedly eschew simple, quick solutions. Most of the problems that they will encounter are embedded in complex systems that they can only begin to grasp in their short time in-country. We must therefore impress on students that our expectation is not that they achieve visible results but rather that they learn to establish working relationships and understand how they fit within a broader ecosystem.

This is equally true for students working in domestic health settings.

CONCLUSION

It is time to shift the paradigm in global and domestic health programming to place the partnership and our partner's priorities at the center. Preparation for student and trainee engagement in these experiences should be developed from this perspective. Students working with underserved populations and in resource-constrained settings should undergo the same rigorous preparation regardless of whether their site is overseas or local. Just as negative experiences can have lasting negative consequences, the best ones can lead to strengthened partnerships, durable benefits for local and global communities, and optimal learning for students, their supervisors, and their hosts.

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