## ORIGINAL RESEARCH

# Visiting Trainees in Global Settings: Host and Partner Perspectives on Desirable Competencies

William Cherniak, MD, MPH, Emily Latham, MPH, Barbara Astle, RN, PhD,
Geoffrey Anguyo, MB, ChB, Tessa Beaunoir, RN, Joel Buenaventura, MD, MPH,
Matthew DeCamp, MD, Karla Diaz, PhD, Quentin Eichbaum, MD, MPH, MFA, PhD,
Marius Hedimbi, PhD, Cat Myser, PhD, Charles Nwobu, MB, ChB,
Katherine Standish, MD, Jessica Evert, MD

*Toronto, Canada; Madison, WI; British Columbia, Canada; Mbarara, Uganda; Durban, South Africa; Quezon, Philippines; Baltimore, MD; Quito, Ecuador; Nashville, TN; Windhoek, Namibia; North Chicago, IL; Accra, Ghana; New Haven, CT; and San Francisco, CA*

**Abstract**

**BACKGROUND** Current competencies in global health education largely reflect perspectives from high-income countries (HICs). Consequently, there has been underrepresentation of the voices and perspectives of partners in low- and middle-income countries (LMICs) who supervise and mentor trainees engaged in short-term experiences in global health (STEGH).

**OBJECTIVE** The objective of this study was to better understand the competencies and learning objectives that are considered a priority from the perspective of partners in LMICs.

**METHODS** A review of current interprofessional global health competencies was performed to design a web-based survey instrument in English and Spanish. Survey data were collected from a global convenience sample. Data underwent descriptive statistical analysis and logistic regression.

**FINDINGS** The survey was completed by 170 individuals; 132 in English and 38 in Spanish. More than 85% of respondents rated cultural awareness and respectful conduct while on a STEGH as important. None of the respondents said trainees arrive as independent practitioners to fill health care gaps. Of 109 respondents, 65 (60%) reported that trainees gaining fluency in the local language was not important.

**CONCLUSIONS** This study found different levels of agreement between partners across economic regions of the world when compared with existing global health competencies. By gaining insight into host partners' perceptions of desired competencies, global health education programs in LMICs can be more collaboratively and ethically designed to meet the priorities, needs, and expectations of those stakeholders. This study begins to shift the paradigm of global health education program design by

encouraging North–South/East–West shared agenda setting, mutual respect, empowerment, and true collaboration.

**KEY WORDS** global health, short-term experience in global health, education, competencies, ethics, international rotations

## INTRODUCTION

There has been a rapid increase of students from all disciplines engaging in global health (GH) training. This includes international electives, fieldwork, volunteering, service learning, and internships.[1-4] Predominantly, trainees from high-income countries (HICs) travel to a low- or middle-income country (LMIC; also referred to as the "Global South") for a short-term experience in global health (STEGH).[5] Trainees may go abroad on STEGH through a program organized by a nongovernmental organization (NGO), academic institution, local ministry of health,[6] or an ad hoc experience.

Such programs generate controversy as to whether they do more harm than good, as noted by mainstream media (such as *The Guardian, CNN, Huffington Post, The New York Times*, and *Al-Jazeera*).[7-11] From an academic perspective, STEGH have been examined along many dimensions, including reciprocity in relationships between participants,[12] the concept of partnership engagement models,[5] and overall benefits and drawbacks for host communities and trainees.[13,14] Building on this work, there has been a push to develop more specific competencies and pedagogies for STEGH, and GH training more broadly.[2,14] It must be noted that not all STEGH takes place abroad. Appropriately, there is an increasing emphasis on local GH, or "glocal."[15] This idea recognizes that the traditional model of international experiences defining GH should be expanded to focus on the health disparities and needs of low-resource communities within high-resource nations.[15] Recently, a list of 7 key themes representing GH and local health were released.[15] Although a topic of pressing concern, this study focuses on STEGH where participants are traveling outside their country of residence.

A seminal set of competencies from the Consortium of Universities for Global Health (CUGH) proposed 4 levels of global health (GH) proficiency that corresponds to degrees of experience and professional commitment. CUGH's Global Citizen and Basic Operational Program-Oriented Levels of proficiency are characterized through 39 competencies across 11 domains. These competencies encompass skills, knowledge, and attitudes ranging from descriptions and understanding of social and environmental determinants of health to ethics, professionalism, health equity, and social justice.[14] They represent substantial progress in current thinking about the aims of GH training. However, the peer consensus process that developed this competency set was without significant input from LMIC stakeholders. Eichbaum cogently argued "the process of developing GH competencies is often insufficiently inclusive of input from host country health professionals and furthermore fails to take adequate account of local health contexts."[16]

Therefore, we created an online survey and distributed it to faculty, staff, and community members who supervise and mentor visiting trainees open to individuals from all regions of the world. The primary objective was to obtain their unique perspectives and incorporate them into existing GH frameworks.

## METHODS

**Survey Design.** An 85-item survey, based mainly on the CUGH interprofessional competencies and some additional competencies, was developed.[2,14] The initial survey was developed through a collaborative editing process among co-investigators from 8 HIC and LMIC countries, including Canada, the United States, Uganda, the Philippines, Ecuador, Namibia, Ghana, and South Africa. To help ensure content and face validity (as well as cross-cultural clarity), the survey was piloted with 5 respondents from LMIC settings. We incorporated this feedback into the final survey. By design, the final version asked first about respondents' own beliefs about competencies in an open-ended fashion before asking them to evaluate specific competencies along a Likert scale. We used a 4-point Likert scale with 1 representing *not important* and 4 representing *very important*. One of the co-investigators translated the original English survey into Spanish, with grammar and spelling double-checked by a second native Spanish speaker from the funding organization, both approved by the institutional review board.

**Survey Distribution.** Because no discrete sample of STEGHs exists—and because the aim was for a broad representation from LMICs—we chose a combination of convenience and snowball sampling and conducted the survey online. Participants and co-investigators forwarded the survey link to GH partnerships and other colleagues. The online survey was open from September 1 to December 31, 2015. The Western Institutional Review Board reviewed and approved the study. The requirements for participation were >18 years of age, consent, and interaction with trainees from other countries. Specifically, at the beginning of the survey respondents were asked, "What best and most specifically describes your role in relation to visiting students from other countries (also referred to as 'international visiting students')?" Respondents had to select 1 of the following:

A. I oversee, supervise, or teach international students at my workplace or institution;
B. I work alongside and interact with international visiting students, but I do not have responsibilities toward them;
C. I host or interact with international students while they are in my community or my home, but not in my workplace; or
D. I do not interact with any international visiting students who are in my community.

Respondents who selected D were excluded from analysis.

**Data Analysis.** Microsoft Excel and STATA version 14.1 were used to analyze survey results. Simple descriptive statistics were carried out on demographic and program-related information. To compare responses between HIC and LMIC respondents, we used the 2015 World Bank economic regions for respondents' country of residence.[17] Chi-square analysis was used to determine initial relationship between responses for questions and economic region. If this analysis suggested a relationship, we performed logistic regression and calculated odds ratios across our defined economic regions and the respondents' role in their organization. For the regression, we collapsed the original Likert-scale categories of *important* and *very important* into one variable (and did so similarly for *somewhat important* and *not important*).

## RESULTS

**Demographics and Program Information.** After excluding 67 individuals who did not respond to questions despite giving consent and 33 who answered only the question about level of student interaction, our final sample included 170 respondents, with 132 participating in English and 38 in Spanish. Respondents represented 38 countries (Table 1) and 22 primary languages (Table 2), with the most common countries being China, the United States, and Ecuador (Table 1). The 2 most common primary languages spoken were English (n = 87; 51%) followed distantly by Spanish

**Table 1.** Current Country of Residence as Reported by Respondents

| Current Country of Residence[*] | Number of Respondents |
|---|---|
| Bangladesh | 1 |
| Belize | 1 |
| Bolivia | 1 |
| Brazil | 4 |
| Cambodia | 2 |
| Canada | 4 |
| Chile | 3 |
| China | 33 |
| Colombia | 1 |
| Dominican Republic | 1 |
| Ecuador | 21 |
| El Salvador | 4 |
| Germany | 1 |
| Ghana | 4 |
| Guatemala | 1 |
| Honduras | 1 |
| India | 12 |
| Italy | 1 |
| Kenya | 5 |
| Kosovo | 1 |
| Malawi | 3 |
| Mexico | 4 |
| Namibia | 2 |
| Nepal | 1 |
| Nicaragua | 1 |
| Nigeria | 1 |
| Peru | 1 |
| Philippines | 1 |
| Rwanda | 1 |
| South Africa | 5 |
| Spain | 1 |
| Sri Lank | 1 |
| Tanzania | 3 |
| Trinidad | 1 |
| USA | 33 |
| Uganda | 5 |
| Vietnam | 3 |
| Zambia | 1 |
| Total | 170 |

[*] Countries listed in alphabetical order.

**Table 2.** Demographic and Program-Specific Information of Survey Respondents

| | Number (%) |
|---|---|
| **Economic region** | |
| High income | 44 (26) |
| Upper middle income | 74 (44) |
| Lower middle income | 31 (18) |
| Low income | 21 (12) |
| **Urban vs rural** | |
| Urban | 146 (86) |
| Rural | 24 (14) |
| **Role in organization** | |
| Doctor | 75 (46) |
| Nurse | 18 (11) |
| Other clinical | 6 (4) |
| NGO staff person | 6 (4) |
| **Type of organization** | |
| Nonclinical | 32 (20) |
| Public health worker | 5 (3) |
| Researcher | 21 (13) |
| Academic health care-related | 44 (26) |
| Nonacademic health care-related | 126 (74) |
| **NGO relationship** | |
| Yes | 45 (26) |
| No | 125 (74) |
| **Community outreach** | |
| Yes | 37 (22) |
| No | 133 (78) |
| **Length of Time Interacting with trainees (y)** | |
| 0-1 | 12 (8) |
| 2-5 | 70 (46) |
| 6-10 | 37 (24) |
| >10 | 34 (22) |
| **Number of trainees hosted per year** | |
| 1-5 | 54 (36) |
| 6-10 | 26 (18) |
| 11-20 | 14 (9) |
| >20 | 54 (36) |
| **Average length of STEGH (wk)** | |
| <2 | 16 (11) |
| 2-3 | 33 (23) |
| 4 | 45 (31) |
| 5-8 | 14 (10) |
| 8-12 | 7 (5) |
| >12 | 30 (21) |
| **Primary language**[*] | |
| English | 87 (51) |
| Spanish | 36 (21) |
| Mandarin | 10 (6) |

NGO, nongovernmental organization; STEGH, short-term experiences in global health.

[*] Additional languages reported included Albanian, English and Spanish, Hindi and Marathi, Kiswahili, Maylayam, Spanish and Aymara, Quechewa, English and Chinese, English Spanish and Portugese, Indonesian, Luganda, Portugese, Spanish and Quechewa, Creole, English and Hindi, French, Italian, Lusoga, Runyankjore, Vietnamese, Dari, English, and Rukiga, Hindi, Khmer.

(n = 36; 21%; Table 1). Less than half were from an upper middle-income nation (n = 74; 44%; Table 2). The vast majority was responsible for supervising trainees (n = 129; 76%), and worked at nonacademic centers (n = 126; 74%; Table 2). Although nearly two-thirds (n = 99; 61%) reported a clinical background, one-fourth (n = 37, 23%) reported being administrators, home-stay hosts, public health workers, and NGO staff.

We asked respondents about their experience with trainees. In terms of number of trainees per year, the most common responses were 1 to 5 (n = 54 of 148; 36%) and >20 (n = 54 of 148; 36%), a nearly bimodal distribution. The reported average length of time trainees spent in the host community was 4 weeks (n = 45 of 145; 31%), and the most commonly encountered level of trainees were undergraduates (Figure 1).

Although most respondents were from an urban setting, based on logistic regression we found that respondents from low-income regions were more likely to be in a rural setting (odds ratio [OR], 5; $P = .021$). Additionally, nonclinical respondents and NGO staff were more likely to be from a rural setting (OR, 7.3; $P = .001$; and OR, 15; $P = .005$, respectively) compared with doctors and nurses.

**Predeparture.** More than 50% of 138 respondents said that trainees were satisfactorily prepared before arriving for their STEGH (n = 80; 58%; Table 3). They rated trainees possessing the ability to demonstrate humility as being more important than confidence (94 of 127; 74% versus 62 of 128; 48%). In all 111 of 128 respondents (87%) overwhelmingly said that demonstrating an understanding of the influence of culture on patients and health care was important. The ability to speak the local language in advance of arriving for a STEGH was not of great importance to 41 of 128 respondents (32%); however, practicing introspection and reflection was rated important by 87 respondents (68%; Table 3).

After performing logistic regression, the lower middle-income group had higher ORs of reporting a previous knowledge of local language as being not important compared with the high-income group (OR, 16.3; $P = .001$).

**Intraexperience.** The intraexperience competencies were divided into those that were generally applicable to all STEGH, those that were health related, and those specific to clinical activities. In the general objectives, 88 or 112 respondents (79%) said that it was equally as important for trainees to learn about

the local culture as medical conditions. Sixty-five of 109 respondents (60%) said it was not important to have trainees become fluent in the local language (Table 4). Additionally, >70% of respondents rated understanding health workforce issues, cultural awareness and sensitivity, cultural effects of behavior and treatment, the link between health and human rights, and the influence of culture on health care and perception of disease as being important (Table 4). There was no significant difference in the rated importance of these competencies across economic categories.

From a health standpoint, some of the most important competencies (rated as being important by ≥90% of respondents) were exhibiting interprofessional values and communication skills that demonstrate respect for all types of professionals and groups working in health, as well as recognizing personal limitations (Table 5). Nearly as important (rated as being important by ≥75% of respondents) were appreciating human resource limitations, and demonstrating professionalism and respect of the entire team, including the local knowledge, culture, and practices. Logistic regression detected no significant differences between economic categories or respondents with different roles in the health care organization.

Clinically, <33% of respondents rated the ability to perform surgical procedures, or to manage diseases rarely seen in the trainee's home country, as important. Logistic regression did not detect significant differences between respondents in rural areas, from different income categories, or across the respondents' role in the health care organization. Interestingly, with 55 of 90 respondents (61%) in agreement, the competency that was rated as least important in this survey was the ability to manage patients without supervision. The most important clinical competencies (rated as being important by >75% of respondents) were being able to work collaboratively with all members of the health care team to advance health care in a low-resource setting, and demonstrating an awareness and recognition of all members of the health care team, including nontraditional and lay providers (Table 6). There was no significant difference found between groups during logistic regression.

**Postexperience.** Ultimately, 75 of 105 local mentors (71%) said that they engaged in a debriefing with trainees after their STEGH (Table 7), and 75% said they received feedback from trainees after completion of the experience. None of the respondents indicated that they would want to have
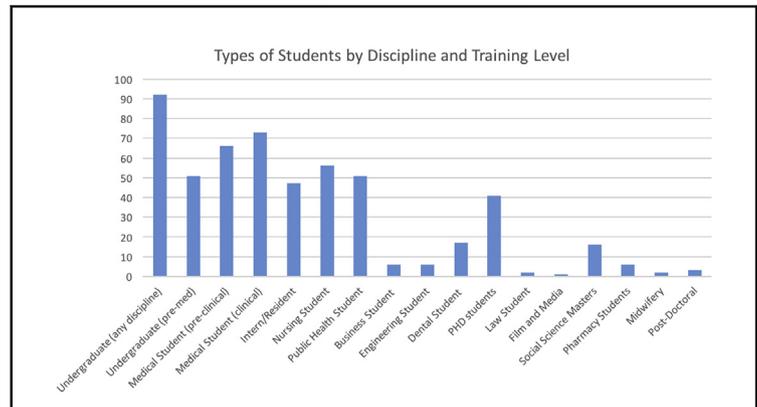


**Figure 1. Current educational program of visiting trainees as reported by host mentors.**

fewer trainees visiting their community (Table 8). There was a nearly equal divide of wanting more versus satisfaction with current volume. Interestingly, none of the respondents believed that trainees came entirely as practitioners. Only 13 of 140 (9%) agreed that trainees give more than they receive during the experience (Table 8). Ninety-four of 104 (90%) said they wished trainees would stay more in touch after completion of the STEGH, and 80 of 102 (78%) indicated that <50% of trainees actually did stay in touch after their experience. Eighty-four of 103 respondents (82%) indicated that only 0 to 25% of trainees returned after their initial experience.

## DISCUSSION

To our knowledge, this is the first survey of STEGH competencies to focus on perspectives of host community members and mentors. The 170 responses encompassed numerous nationalities, languages, geographic/economic regions, and professional backgrounds (Tables 1 and 2). Very interesting trends emerged along the lines of program development, competencies, and host perspectives on GH experiential learning (Tables 1-8).

Of additional interest is that 14% of respondents were from rural areas, and 33% were from nonclinical backgrounds or engage in research activities. A specific goal of using a convenience sampling and snowball method was to allow the individuals who might be missed by traditional sampling methods to provide their input. Additionally, 65% of STEGHs are ≤4 weeks, which fits well with the current literature on international programming.[18] Nearly one-fourth of respondents said that their programs had a community-based outreach component (37 of 170; 22%). Programs that accepted >20

**Table 3. Rating of Predeparture Competencies**

| | Number (%) |
|---|---|
| Overall student preparation level | |
| Completely unprepared | 0 (0) |
| Less than satisfactory preparation | 27 (20) |
| Satisfactory preparation | 80 (58) |
| Well prepared | 31 (22) |
| Importance of confidence and humility | |
| Trainees should be humble | 40 (30) |
| Trainees should be confident | 11 (8) |
| Trainees should be both confident and humble | 77 (57) |
| No opinion | 7 (5) |
| Importance of components of clinical medicine | |
| Chronic disease and NCDs | 26 (19) |
| ID and tropical medicine | 21 (15) |
| Both equally important | 70 (51) |
| No opinion | 21 (15) |
| Be aware of the influence of culture | |
| Important | 111 (87) |
| Somewhat important | 15 (12) |
| Not important | 2 (2) |
| Demonstrate humility | |
| Important | 94 (74) |
| Somewhat important | 31 (24) |
| Not important | 2 (2) |
| Maintain introspection and reflection | |
| Important | 87 (68) |
| Somewhat important | 39 (30) |
| Not important | 2 (2) |
| Understand culture shock | |
| Important | 76 (59) |
| Somewhat important | 46 (36) |
| Not important | 6 (5) |
| Understand realities of working in low- resource setting | |
| Important | 74 (59) |
| Somewhat important | 44 (35) |
| Not important | 7 (6) |
| Confidence | |
| Important | 62 (48) |
| Somewhat important | 53 (41) |
| Not important | 13 (10) |
| Speak local language | |
| Important | 41 (32) |
| Somewhat important | 38 (30) |
| Not important | 49 (38) |

ID, infectious diseases; NCDs, noncommunicable diseases.

**Table 4. Intra-STEGH General Competencies**

| | Number % |
|---|---|
| Gain knowledge of culture vs medical conditions | |
| Medical more important | 10 (9) |
| Culture more important | 12 (11) |
| Equally important | 88 (79) |
| Do not agree with either | 2 (2) |
| Health and human rights | |
| Important | 93 (86) |
| Somewhat important | 15 (14) |
| Not important | 0 (0) |
| Culture on perception of disease | |
| Important | 94 (86) |
| Somewhat important | 13 (12) |
| Not important | 2 (2) |
| Cultural effects on patient behavior | |
| Important | 87 (81) |
| Somewhat important | 20 (19) |
| Not important | 1 (1) |
| Cultural awareness/sensitivity | |
| Important | 83 (76) |
| Somewhat important | 24 (22) |
| Not important | 2 (2) |
| Health care workforce issues | |
| Important | 79 (72) |
| Somewhat important | 28 (26) |
| Not important | 2 (2) |
| Social and economic determinants of health | |
| Important | 71 (65) |
| Somewhat important | 29 (27) |
| Not important | 9 (8) |
| Learn history | |
| Important | 37 (34) |
| Somewhat important | 39 (36) |
| Not important | 33 (30) |
| Use words from language | |
| Important | 35 (32) |
| Somewhat important | 40 (37) |
| Not important | 34 (31) |
| Fluently communicate | |
| Important | 14 (13) |
| Somewhat important | 30 (28) |
| Not important | 65 (60) |

STEGH, short-term experiences in global health.

trainees per year had an OR of 3.1 ($P = .017$) compared with programs accepting 1 to 5 trainees, of having an outreach component.

Although using convenience sampling had great advantages as described previously, a limitation of this study was that it made it difficult to capture a response rate, and it had a response bias toward those engaged in networks with the research group and HIC entities. Additionally, the use of a web-based survey instrument has limitations that introduce additional response, social acceptability, and culture bias, such as not being accessible to those with limited Internet, not being a culturally acceptable form of divulging information, and lack of trust between researchers and subjects. Based on Table 2, we are confident that we obtained a wide and

diverse subset of individuals. However, additional studies with mixed methods are needed.

**Predeparture.** In assessing the predeparture competencies, it was reassuring that none of the respondents believed that visiting trainees were completely unprepared, and that 58% felt that they were at least "satisfactorily prepared." Although positive, it should be noted that nearly equal numbers rated trainees as being "less than satisfactorily prepared" as they did "well prepared" (20% and 22%, respectively). This is a clear sign that the work to date on predeparture training (PDT) is having a positive effect, but that there is still much to do in ensuring consistency and preparation of trainees in advance of STEGH.

Additionally, respondents valued a trainee arriving with a well-developed sense of humility, and would value confidence more if the 2 came together. Confidence on its own was not a highly rated trait. More than half of the respondents (59%) rated understanding the realities of working and living in a low-resource setting as being important, although 100% of respondents from LMIC settings and 57% from HICs rated it as being important. HICs contain homeless and impoverished populations, aboriginal and first nation communities, and other marginalized regions that involve working and living in a low-resource setting. Building a greater understanding of this competency for trainees in HICs is proposed as an important consideration moving forward.

It is telling that the most highly ranked predeparture competency—with 87% rating it important—was an awareness of how culture influences patients and health care. This is in stark contrast to only 32% valuing a previous knowledge of the local language as being important. Language is widely regarded as a key component of cultural sensitivity,[19] yet this was not highly valued by the respondents in the present study. These results support an expanded emphasis on ensuring trainees are being prepared for the importance of cultural awareness and calls into question the role of intense language training, particularly for STEGH where most trainees are not expected to return to the host community and are there for a relatively short period of time.

As a consideration, we do not know if the majority of respondents were from areas where visiting trainees already had well developed fluency in the local language on arrival, and so respondents may have felt that learning language was less important.

| Table 5. Health-Related Intra-STEGH Competencies | |
|---|---|
| | Number (%) |
| **Recognize personal limitations** | |
| Important | 89 (90) |
| Somewhat important | 10 (10) |
| Not important | 0 (0) |
| **Demonstrate interprofessional values, being respectful of all staff** | |
| Important | 85 (88) |
| Somewhat important | 12 (12) |
| Not important | 0 (0) |
| **Demonstrate professionalism and respect of the entire team, as well as the culture and practices** | |
| Important | 81 (82) |
| Somewhat important | 18 (18) |
| Not important | 0 (0) |
| **Appreciate human resource limitations** | |
| Important | 75 (77) |
| Somewhat important | 19 (19) |
| Not important | 4 (4) |
| **Demonstrate understanding of local code of ethics** | |
| Important | 70 (72) |
| Somewhat important | 22 (23) |
| Not important | 5 (5) |
| **Understand patient barriers to accessing health care** | |
| Important | 70 (71) |
| Somewhat important | 22 (22) |
| Not important | 7 (7) |
| **Demonstrate skill in evidence-based program planning and implementation** | |
| Important | 60 (67) |
| Somewhat important | 24 (27) |
| Not important | 6 (7) |
| **Improve ability to function in a low-resource setting** | |
| Important | 66 (67) |
| Somewhat important | 23 (23) |
| Not important | 10 (10) |
| **Appreciate the role of local public health** | |
| Important | 65 (66) |
| Somewhat important | 19 (19) |
| Not important | 14 (14) |
| **Be able to describe the local health system** | |
| Important | 49 (51) |
| Somewhat important | 38 (39) |
| Not important | 10 (10) |
| **Be able to conduct or assist with research** | |
| Important | 45 (45) |
| Somewhat important | 38 (38) |
| Not important | 17 (17) |
| **Understand how to maintain and use data entry logs** | |
| Important | 42 (44) |
| Somewhat important | 40 (42) |
| Not important | 14 (15) |
| STEGH, short-term experiences in global health. | |

**Table 6. Clinical Competencies**

| | Number (%) |
|---|---|
| Understand the roles of all HCPs on the team | |
| Important | 74 (80) |
| Somewhat important | 13 (14) |
| Not important | 5 (5) |
| Should be able to work collaboratively | |
| Important | 72 (78) |
| Somewhat important | 13 (14) |
| Not important | 7 (8) |
| Care for patients with supervision | |
| Important | 57 (61) |
| Somewhat important | 22 (23) |
| Not important | 15 (16) |
| Treatment plan | |
| Important | 41 (45) |
| Somewhat important | 41 (45) |
| Not important | 10 (11) |
| Expand ability to diagnose and treat patients | |
| Important | 41 (45) |
| Somewhat important | 36 (39) |
| Not important | 15 (16) |
| Perform surgical procedures | |
| Important | 26 (28) |
| Somewhat important | 30 (33) |
| Not important | 36 (39) |
| Manage rare diseases seen at home | |
| Important | 25 (27) |
| Somewhat important | 34 (37) |
| Not important | 32 (35) |
| Care for patients without supervision | |
| Important | 13 (14) |
| Somewhat important | 22 (24) |
| Not important | 55 (61) |

HCP, health care providers.

**Table 7. Post-STEGH Competencies**

| | Number (%) |
|---|---|
| Preceptors receive feedback from trainees | |
| Yes | 77 (72) |
| No | 30 (28) |
| Engage in debriefing with trainees | |
| Yes | 75 (71) |
| No | 30 (29) |
| Can contact student's home institution | |
| Yes | 66 (65) |
| No | 36 (35) |

STEGH, short-term experiences in global health.

health staff were regarded as critically important, as were being able to recognize personal limitations and human resource limitations. Learning "hard skills" such as how to conduct research, performing

**Table 8. Survey Respondent Perspectives of STEGH**

| | Number (%) |
|---|---|
| More or less trainees | |
| More | 71 (48) |
| Less | 0 (0) |
| Current amount is fine | 77 (52) |
| Trainees role in STEGH | |
| Trainees come as learners | 61 (43) |
| Trainees come as practitioners/providers | 0 (0) |
| Both of the above | 77 (54) |
| Neither statement applies | 4 (3) |
| Benefit from STEGH | |
| Trainees get more from the STEGH | 55 (39) |
| Trainees give more on the STEGH | 13 (9) |
| Reciprocal benefits | 65 (46) |
| Other | 7 (5) |
| Trainees remain in contact after STEGH (%) | |
| 0 | 10 (10) |
| 1-25 | 52 (51) |
| 26-50 | 18 (18) |
| 51-75 | 12 (12) |
| 76-99 | 8 (8) |
| 100 | 2 (2) |
| Do you wish more trainees stayed in touch? | |
| Yes | 94 (90) |
| No | 10 (10) |
| Trainees who return after initial STEGH (%) | |
| 0 | 23 (22) |
| 1-25 | 61 (59) |
| 26-50 | 12 (12) |
| 51-75 | 4 (4) |
| 76-99 | 3 (3) |
| 100 | 0 (0) |

STEGH, short-term experiences in global health.

**Intraexperience.** Similar to PDT, during the STEGH, learning about local medical conditions was valued equally to learning about local culture. This supports new findings and challenges the beliefs of health science trainees and faculty that STEGH are intended primarily to enhance clinical skills.[20] A large majority of respondents resonated with the importance of learning about cultural sensitivity, the effect of culture on patient behavior, on health care, and on perceptions of disease as well as understanding health and human rights and workforce issues. This is a sobering reminder to trainees and faculty planning STEGH to be prepared, and plan for, time to explore areas outside of clinical settings. It also supports institutions valuing such learning with academic credit and related valuations.

In the clinical competencies included in the present study, respect and collegiality for all allied

surgical procedures, maintaining and reviewing data entry logs, and learning to describe the local health care system were rated as being much less important. From a practical standpoint, developing communication and collaborative skills and behaviors even in clinical settings, is as or more important for the trainee than honing clinical skills. Additionally, the present study highlights the importance of trainees being able to appreciate the context of the international setting, and the human condition they are encountering. It underscores how essential it is both for trainees to recognize their own limitations, and to act on this recognition, so they do not attempt clinical practice beyond their level of mastery, or without adequate supervision. These findings fit with recent literature that draws a distinction between "acquired" competencies and approaches to learning that predominate in the individualist cultures of HICs, and "participatory" competencies (such as collaboration, teamwork, communication, cultural sensitivity) and approaches to learning that arise out of dynamic social situations in collectivist cultures of LMICs. These approaches to learning and competency development each require different methods of evaluation and assessment.[21]

**Postexperience.** There has been less pedagogy developed around the postexperience period and reinforcing of learning that occurs abroad. However, 2 that are the most described in the literature target self-reflection and debriefings.[14,22] In the group surveyed, 71% of respondents said they engaged in a debriefing session with trainees, but only 35 identified that they had them complete a reflective activity. Self-reflection, particularly critical reflection, has proven very important in maximizing the personal and professional development during STEGH.[14,22] It is important to note that there are still many host mentors who are not engaging with trainees in these ways, perhaps in accordance with different cross-cultural valuations and levels of comfort in the practice of reflection.

The fact that no respondents said they would like to receive fewer trainees is very encouraging. Equally as important, of 142 respondents, none felt that trainees were coming to their sites as already capable practitioners to practice without additional learning, and only 13 of 140 (9%) thought that trainees gave more than they received from the STEGH. This is a strong sign that host mentors do not expect trainees engaging in STEGH to fill critical health care gaps, but rather are being allowed to come to communities to learn from them.

Unfortunately, very few trainees seem to stay in touch with the host community members after they depart, and even fewer return to the community. This underscores that trainees often are getting a viewpoint of GH at one moment in time in one community and not necessarily appreciating a longitudinal viewpoint of a community and its dynamic realities over time. It is clear that the individuals mentoring the trainees in host communities would like this to change, as 90% of respondents reported that they wished more trainees would stay in touch after completion of the STEGH.

## CONCLUSIONS

To those generous partners hosting and supervising trainees during STEGH—often without any substantial remuneration—teaching competencies such as cultural sensitivity, and continuing to demonstrate and develop humility and teamwork skills were clearly more important than acquiring and learning clinical or technical skills. This is in stark contrast to the goals and objectives being put forth by many GH programs in HICs. It is our hope that this data will begin a dialogue to build collaboratively developed learning objectives and competencies for STEGH, which will ultimately create stronger education for trainees, and enhance mutual respect between partners.

## ACKNOWLEDGMENTS

## REFERENCES

1. Association of American Medical Colleges. GQ medical school graduation questionnaire: all schools summary report: final. Washington DC: Author; 2011.

2. Cherniak W, Drain PK, Brewer TF. Educational objectives of international medical electives — a narrative literature review. Acad Med 2013;88:1778–81.

3. Drain PK, Primack A, Hunt DD, Fawzi WW, Holmes KK, Gardner P. Global health in medical education: a call for more training

and opportunities. Acad Med 2007;82:226–30.

4. Matheson AI, Walson JL, Pfeiffer J, Holmes K. Sustainability and growth of university global health programs. Center for Strategic & International Studies (CSIS), University of Washington. Available at: https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/publication/140507_Matheson_UniversityEngagement_Web.pdf. Accessed October 19, 2016.

5. Loh LL, Cherniak W, Dreifuss BA, Dacso MM, Lin HC, Evert J. Short term global health experiences and local partnership models: a framework. Global Health 2015;11:50.

6. Provision inmediata de medicamentos de dificile acceso requeridos por el [Immediate provision of medicines inaccessible]. Available at: http://www.salud.gob.ec/. Accessed October 19, 2016.

7. Birrell I. Before you pay to volunteer abroad, think of the harm you might do. The Guardian. Available at: https://www.theguardian.com/commentisfree/2010/nov/14/orphans-cambodia-aids-holidays-madonna; 2010. Accessed October 19, 2016.

8. Stupart R. Does 'voluntourism' do more harm than good? CNN Travel. Available at: http://travel.cnn.com/explorations/life/richard-stupart-voluntourism-does-more-harm-good-260269/; 2013. Accessed October 19, 2016.

9. Biddle P. The problem with little white girls, boys and voluntourism. The Huffington Post. Available at: http://www.huffingtonpost.com/pippa-biddle/little-white-girls-voluntourism_b_4834574.html; 2014. Accessed October 19, 2016.

10. Kursher J. The voluntourist's dilemma. The New York Times. Available at: http://www.nytimes.com/2016/03/22/magazine/the-voluntourists-dilemma.html?_r=0; 2016. Accessed October 19, 2016.

11. Jazeera Al. "The Stream." Medical volunteerism: the risks and benefits of non-professional health workers. Available at: http://stream.aljazeera.com/story/201608012124-0025256; 2016. Accessed October 19, 2016.

12. Bozinoff N, Dorman KP, Kerr D, et al. Toward reciprocity: host supervisor perspectives on international medical electives. Med Educ 2014;48:397–404.

13. Holmes D, Zayas LE, Koyfman A. Student objectives and learning experiences in a global health elective. J Community Health 2012;37:927–34.

14. Jogerst K, Callender B, Adams V, et al. Identifying interprofessional global health competencies for 21st-century health professionals. Ann Glob Health 2015;81:239–47.

15. Rowthorn V. Global/local: what does it mean for global health educators and how do we do it? Ann Glob Health 2015;81:593–601.

16. Eichbaum Q. The problem with competencies in global health education. Acad Med 2015;90:414–7.

17. WDI 2015 Maps. Available at: http://data.worldbank.org/maps2015; 2015. Accessed October 19, 2016.

18. Melby MK, Loh LC, Evert J, Prater C, Lin H, Khan OA. Beyond medical "missions" to impact-driven short-term experiences in global health (STEGHs): ethical principles to optimize community benefit and learner experience. Acad Med 2016;91:633–8.

19. Anderson K, Bocking N. AFMC Global Health Resource Group and CFMS Global Health Program. Preparing medical students for electives in low-resource settings: a template for national guidelines for pre-departure training 2008. Available at: http://www.old.cfms.org/downloads/Pre-Departure%20Guidelines%20Final.pdf.

20. Abedini NC, Gruppen LD, Kolars JC, Kumagai AK. Understanding the effects of short-term international service-learning trips on medical students. Acad Med 2012;87:820–8.

21. Eichbaum Q. Acquired and participatory competencies in health professions education: definition and assessment in global health. Acad Med 2016;92:468–74.

22. Howe A, Barrett A, Leinster S. How medical students demonstrate their professionalism when reflecting on experience. J Med Educ 2009;43:942–51.