

# Beyond Medical “Missions” to Impact-Driven Short-Term Experiences in Global Health (STEGHs): Ethical Principles to Optimize Community Benefit and Learner Experience

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## Abstract

Increasing demand for global health education in medical training has driven the growth of educational programs predicated on a model of short-term medical service abroad. Almost two-thirds of matriculating medical students expect to participate in a global health experience during medical school, continuing into residency and early careers. Despite positive intent, such short-term experiences in global health (STEGHs) may exacerbate global health inequities and even cause harm. Growing out of the “medical missions” tradition, contemporary participation continues

to evolve. Ethical concerns and other disciplinary approaches, such as public health and anthropology, can be incorporated to increase effectiveness and sustainability, and to shift the culture of STEGHs from focusing on trainees and their home institutions to also considering benefits in host communities and nurturing partnerships. The authors propose four core principles to guide ethical development of educational STEGHs: (1) skills building in cross-cultural effectiveness and cultural humility, (2) bidirectional participatory relationships, (3) local capacity building, and (4) long-term sustainability.

Application of these principles highlights the need for assessment of STEGHs: data collection that allows transparent comparisons, standards of quality, bidirectionality of agreements, defined curricula, and ethics that meet both host and sending countries’ standards and needs. To capture the enormous potential of STEGHs, a paradigm shift in the culture of STEGHs is needed to ensure that these experiences balance training level, personal competencies, medical and cross-cultural ethics, and educational objectives to minimize harm and maximize benefits for all involved.

**G**rowing interest in global health has promoted the expanding phenomenon of short-term experiences in global health (STEGHs). Historically undertaken by licensed professionals, trainees are increasingly involved. Trainee participation in STEGHs can drastically vary in scope, but considered elements include short duration abroad (1–30 days),<sup>1</sup> nature of activities undertaken (e.g., clinical care, education, research, public health efforts),<sup>2</sup> and philosophy of the facilitating organizations.

Almost two-thirds of matriculating medical students expect to participate in a STEGH during medical school.<sup>3,4</sup> This has driven a proliferation of programs in the form of alternative spring breaks, service trips, and medical

electives.<sup>5</sup> STEGH participants often have multiple objectives ranging among education, training, social responsibility, medical service, and/or tourism.<sup>6</sup> Of note, STEGHs have been shown to provide significant educational gains that are foundational for preparing globally engaged health care workers from higher-income countries (HICs).<sup>7</sup> Common educational objectives for HIC trainees include exposure to diseases uncommon in HIC settings, increased clinical acumen, development of professional networks, fulfilling a social responsibility, and providing care to the underserved.<sup>8</sup> However, STEGHs focused solely on clinical service, and participant learning may constrain the broader aim of international development, elimination of health disparities, and public health, particularly if the experiences are not associated with a capacity-building agenda.<sup>1,9,10</sup>

In the absence of clear definitions, standards, impact data, and appropriate conduct, STEGHs may represent a suboptimal use of time and resources,<sup>1</sup> harm the host community,<sup>11</sup> and even perpetuate global health inequities.<sup>12</sup>

Present literature pertaining to STEGHs by practitioners and learners from HICs is primarily descriptive<sup>1</sup> and is limited to case studies, reflections, ethical discussions, and descriptions of curricula. In this Perspective, we propose recommendations for the ethical implementation of STEGHs especially relevant for those involving trainees; however, many concepts are generalizable for all STEGHs. These principles require shifting from a primary focus on trainees’ experience, to preventing harm and effectively addressing the agenda of host communities, who, through this model, become participatory partners. These principles provide an overarching framework for a needed paradigm shift on which practical “how-to” guides can be based.<sup>13</sup>

## The “Medical Missions” Tradition and Contemporary Global Health Experiences

Medical missions historically accompanied missionary work and colonization efforts. Dr. David Livingstone, the well-known 19th-century medical missionary, primarily aimed to spread Christianity but also performed obstetrical procedures

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and surgeries.<sup>14</sup> Medical missionary work often garnered local goodwill and allowed proselytizing, thereby facilitating colonial governments' management and exploitation of their territories.<sup>15</sup> Similarly, Dr. Norman Bethune's surgical missions during the Spanish Civil War and World War II in China were inspired by political ideology (i.e., avowal of communism).<sup>16</sup>

In turn, travel and colonization gave rise to the field of tropical medicine. In the late 19th century, Albert Dock Hospital established the London School of Hygiene and Tropical Medicine, which provided care for ill travelers returning from abroad.<sup>17</sup> One predecessor of contemporary STEGHs could be the school's first epidemiological research expedition in the Roman Campagna in 1900, which documented that mosquitoes were required for the transmission of malaria.<sup>17</sup>

A move beyond faith-based medical missionary traditions began with the secular, population-based approach exemplified by the International Committee for the Red Cross and Red Crescent. Created in 1863, the organization provided care without regard to affiliation and formed the basis for modern humanitarian assistance.<sup>18</sup> *Medecins Sans Frontieres* (Doctors without Borders) follows this model as well.<sup>19</sup>

Global health work was transformed in the mid-20th century with the founding of the World Health Organization (WHO), in addition to advances in hygiene and the development of antibiotics and vaccines. Large-scale international development programs were created around these interventions, undertaken by national governments in cooperation with organizations like the WHO, nongovernmental firms, and universities.<sup>20</sup> With a shifting focus from patient care to population-based efforts, the role of physicians became less about clinical acumen and more about public health, capacity building, and program administration.

Medical missions gained prominence in the late 1970s and 1980s, owing to the ease of modern air travel and growing awareness of health challenges in low- and middle-income countries (LMICs). By the late 1990s, the advent of the Internet facilitated the growth

and visibility of numerous community groups and nonprofit organizations offering STEGHs, leading to discussions around their educational and ethical considerations.<sup>13</sup> Modern-day "medical missions" can be either faith based or secular in their underlying ideologies.

### **STEGH Ethical Principles: Focusing on Community Benefit**

Accredited and extracurricular opportunities for STEGH participation have arisen in response to the widespread interest within undergraduate, medical, and postgraduate training programs.<sup>3</sup> Many of these STEGHs operate under flawed assumptions that such programs are relatively innocuous and meet specific community needs. However, this is not always true. For example, local partners desiring preventive health promotion activities may not be well served by STEGHs that focus on providing reactive approaches to diseases. Suboptimally conducted STEGHs may also lead to inappropriate volunteer medical care (including unregulated provision of medications, equipment, and surgeries).<sup>1,21,22</sup> If not integrated with broader plans for health and development, STEGHs can potentially undermine long-term community health outcomes by shifting responsibility from local governments to STEGH providers, which in turn may lead to some patients waiting for subsequent STEGHs to receive care while their conditions worsen.<sup>5</sup> Likewise, narrow focus on clinical learning objectives for trainees may be a missed opportunity for the development of unique, broad-based, interprofessional global health competencies.<sup>23</sup> Finally, without standardization and guidelines, STEGHs can harm local community health systems and social capital by sidelining local health professionals or working in a disjointed fashion, which may cultivate negative sentiment toward visitors, further limiting impact.

We have identified four principles that highlight key ethical areas in STEGH planning and execution to mitigate harms and optimize benefits for host communities: (1) emphasis on cross-cultural effectiveness skills and cultural humility, (2) bidirectional participatory relationships, (3) local capacity building, and (4) long-term sustainability (see List 1).

### **Principle 1: Skills building in cross-cultural effectiveness and cultural humility are critical components of successful STEGHs**

Health care providers and students receive limited education regarding cultural beliefs and health practices.<sup>1,24,25</sup> Health professions educators may assume that cultural competency can be taught as a technical skill and focus on "static culture traits."<sup>26,27</sup> However, anthropologists teach an "explanatory models" approach,<sup>26</sup> cultural humility,<sup>28</sup> and communication skills that may be more effective when not only cultural but also language, economic, and power differentials exist between local communities and STEGH participants. The Listen, Explain, Acknowledge, Recommend, Negotiate (LEARN) framework<sup>29</sup> is a medical anthropology model that has been used successfully in interprofessional training in cultural competency.<sup>30</sup> Predeparture training for STEGHs involving role-play and discussion can use cross-cultural effectiveness resources such as the *Worlds Apart* film series.<sup>31</sup>

Without significant understanding and preparation of cultural diversity and cross-cultural communication methods, STEGHs are more likely to cause harm and less likely to contribute meaningfully to learner and community development. Didactic sessions about cultural beliefs and ethnographic techniques can improve learner skills in cross-cultural effectiveness and cultural humility, allowing them to recognize and value local partners' knowledge and advice over preconceptions and hubris.

The underlying principle of any STEGH is that participation is a privilege, not a right. Complementing cultural humility, the principles of humility, nonmaleficence, and professionalism demand that STEGH stakeholders guard against trainees providing suboptimal or inadequately supervised clinical care under the guise of appropriate training opportunities or unsubstantiated community health gains.<sup>1,32-34</sup> Students and trainees can be allowed to learn, deliver, and participate in clinical care, but only under supervision and with necessary redundancies, such as those that exist in their home training environments. Each trainee's abilities and degree of independence should be

## List 1

**Summary Guidelines for Implementing Short-Term Experience in Global Health (STEGH) Principles****Principle 1: Skills building in cross-cultural effectiveness and cultural humility are critical components of successful STEGHs**

- Understand that (HIC) health care professions medical education is limited in fully preparing one for work abroad; predeparture training and other extracurricular professional development is necessary preparation
- Promote “explanatory models” and communication skills (e.g., Listen, Explain, Acknowledge, Recommend, Negotiate [LEARN] framework<sup>29</sup>)
- If locally allowed, HIC trainees may provide supervised services within scope of training and ability as assessed in the local LMIC setting
- Recognize that trainee independence is often decreased because of language and cultural discordance, lack of familiarity with formularies, resource level, and local standards of care
- Recognize that ethics and professionalism should travel across borders

**Principle 2: STEGHs must foster bidirectional participatory relationships**

- Adopt paradigm focusing on local capacity building and participatory program priority setting between HIC and LMIC stakeholders
- Determine scope of STEGHs through bipartisan collaboration and community engagement rather than unilateral “aid”
- Engage other disciplines (e.g., anthropology, public health) to help develop bidirectional relationships between local community and visiting institution
- Support reverse innovation and reciprocity of opportunities
- Focus on community development rather than solely learner skills or visiting institution prestige

**Principle 3: STEGHs should be part of longitudinal engagement that promotes sustainable local capacity building and health systems strengthening**

- Optimize resources to address locally identified needs
- Avoid operating STEGHs as short-term “fixes” to long-term complex problems
- Create new funding models to increase participation, access, and exchange and to minimize power imbalances and inequities
- Focus on creating long-term capacity in public health, primary health care, and health systems

**Principle 4: STEGHs must be embedded within established, community-led efforts focused on sustainable development and measurable community health gains**

- Understand the roles of poverty and inequality, public health infrastructure, and human resources for health in promotion of long-term population health
- Understand that downstream clinical efforts may serve to delay morbidity or mortality rather than reduce them, and give consideration to a more upstream, root-cause focus
- Understand the limitations of repeated and/or isolated short-term efforts
- Ensure development and monitoring of appropriate outcome indicators
- Employ long-term planning to address development goals

Abbreviations: HIC indicates high-income countries; LMIC, low- and middle-income countries.

reassessed once in LMIC host settings, rather than assuming that levels of independence in novel LMIC settings mirror those afforded in familiar HIC training environments. Because of language and cultural discordance between STEGH participants and host communities, as well as novel formularies, standards of care, and treatment algorithms, it is often appropriate that trainees have less independence and scope of practice when

abroad. In other words, simply crossing international borders should not degrade professional and ethical standards and often requires trainees to take a step back in their scope of independent activities.

**Principle 2: STEGHs must foster bidirectional participatory relationships**

STEGHs have sometimes been referred to as “medical voluntourism,”<sup>35</sup> which may exacerbate economic and power differentials between provider and host

communities.<sup>33</sup> Short-term voluntourists and recipients can be characterized, respectively, as “people who travel easily and people who do not.”<sup>36</sup> The latter also often lack access to health care, food, and economic and political power and may feel unable to say no to charity in any form offered. Programs that do not actively combat this inequality gap will not sustainably address the long-term needs of those they aim to help. It is the responsibility of those who travel from more developed settings to ascertain the needs of those they desire to help, without preconceived notions of their own, and to partner with these communities to create mutually beneficial programs, such as the Medical Education Partnership Initiative (MEPI).<sup>37</sup>

Health professionals traveling abroad may bring needed skills or equipment to LMICs, but unidirectional STEGHs run the risk of creating dependency by providing short-sighted fixes to long-term, complex problems.<sup>35</sup> Furthermore, physicians may not always be able to tackle these problems alone; multidisciplinary teams including public health experts, development practitioners, engineers, anthropologists, and others are often necessary.

For certain surgical specialties (e.g., cataract, cleft palate/lip, oral, and obstetric fistula repair surgery), providing downstream services by STEGH volunteers commonly removes pressure on local governments to provide and respond to health needs with long-term solutions, thereby “masking deeper ills of social, political and economic inequities.”<sup>24</sup> They also may create new and unforeseen issues (e.g., infections due to lack of appropriate follow-up) and perpetuate the illusion that foreigners are better able to address local needs.<sup>6</sup> Longer-term solutions engage local providers in identifying areas to augment training capacity and developing plans to address these priorities, eventually phasing out external support within a defined timeline in favor of locally developed resources.<sup>38</sup> Successful examples include the Himalayan Cataract Project, which pairs local ophthalmologists with visiting experts to provide cataract procedures in rural areas of the world,<sup>39,40</sup> and partnerships through MEPI.<sup>37</sup>

Participatory bidirectional relationships also encourage “reverse innovation”—the adaptation of health care and innovative

successes developed in LMIC settings to HIC contexts.<sup>41</sup> For example, community health and outreach programs in Africa and India have provided models for community health workers in New York City.<sup>42</sup> In this manner, bilateral collaboration rather than unilateral aid can be ethical and instructive for all.<sup>43</sup> For trainees participating in STEGHs, those undertaken in the context of bidirectional institution-level relationships allow for modeling of ideal longitudinal global engagement.

**Principle 3: STEGHs should be part of longitudinal engagement that promotes sustainable local capacity building and health systems strengthening**

The shortage of human resources for health (HRH) is one of global health's biggest challenges.<sup>44</sup> STEGHs often focus on supporting the participants' interests and skills sets and their desire to help those in need. Too rarely do STEGHs prioritize the congruence between local LMIC community priorities and training interests with the abilities of visiting HIC participants. STEGHs must incorporate local needs/strengths and promote capacity building; good examples include the Himalayan Cataract Project referenced above, and MEPI "communities of practice."<sup>45</sup>

STEGH participants are often self-funded. Together with the donation of financial and in-kind resources, they often represent a potential revenue source for local communities that could be used in building local capacity. This may not constitute cost-effective global health investment compared with high-impact, low-cost interventions, such as vaccines and water purification. However, research has shown that participants who spend thousands of dollars on STEGHs are unlikely to donate that amount instead.<sup>46</sup> Given this dynamic, the use of funds related to STEGHs to support larger projects targeted at host community impacts should be carefully explored. Channeling funds for STEGHs through institutional program fees, with visiting participants paying a sliding scale fee based on their own finances, may enable more people to participate while minimizing the power imbalances arising from a sense of entitlement and one-way charity. Participants' fees could partly allay the travel costs of host community members to the STEGH-sending country as well, resulting in true cross-cultural exchange.

Capacity development includes strengthening of long-term comprehensive primary health care in communities abroad, requiring that STEGH participants understand structural and social determinants of inequitable conditions.<sup>35</sup> Consequently, creation of effective capacity-building plans requires training and/or a familiarity with principles of international development, social determinants of health, and public health systems. A broader understanding of community health would optimize engagement with health systems development efforts. Although inclusion of capacity development in STEGHs may significantly alter learner expectations—from direct delivery of medical/surgical care to one of partnership, mutual education, and sustainability—such STEGHs hold the most promise for impact in the host community. This approach may prove ultimately more fulfilling for the returning learner, who might also apply such approaches at home.<sup>42</sup>

**Principle 4: STEGHs must be embedded within established, community-led efforts focused on sustainable development and measurable community health gains**

Many populations in LMICs and subpopulations in HICs suffer from poor health and lack of access to health care, arising commonly from poverty, inadequate infrastructure, and HRH shortages.<sup>47,48</sup> These provide a commonly seen impetus for STEGHs: to provide health care for people who otherwise would have limited or no access. Yet, long-term solutions for these communities need to involve local infrastructure and human resource development to avoid dependence on a repetitive and often disjointed cycle of STEGHs.

Downstream clinical efforts serve to delay morbidity or mortality rather than prevent the underlying condition.<sup>24</sup> Population health measures including education or awareness campaigns, or public health programs for vaccination or sanitation, might reduce the need for short-term outsiders filling in for local HRH. Global health organizations that have had success improving local population health and health care delivery often commit to long-term community engagement.

Traditional "medical missions" (both secular and faith based) reflect a certain paternalism by using HIC

health care standards as a benchmark for health in LMIC contexts. This tradition has the risk of prioritizing the needs of the sending institution over local realities and approaches. For instance, institutions may use their resources toward enabling the participant experiences and technical skills rather than focusing on long-term population health or HRH capacity building in communities abroad. This problematic approach is also evident in the mind-set that any LMIC can suffice to provide STEGH opportunities to learners. The locations for possible STEGH partnerships must be seen as more than an undifferentiated mass of "underdeveloped" communities with poor health. Participatory programs that emphasize increasingly common development principles of strengths-based approaches with local control may provide new models and paradigms for STEGHs to empower locals while avoiding the pitfalls of "philanthropic colonialism."<sup>49</sup>

Monitoring STEGH sustainability and effectiveness requires the use of appropriate indicators, which must incorporate a longitudinal perspective. For example, if success is measured using process indicators (e.g., number of patients seen, successful surgeries, or prescriptions dispensed), service-focused STEGHs could be considered highly effective. However, if assessed in terms of health outcomes (e.g., change in disease occurrence or improved access to consistent medical services), STEGH effectiveness is less clear-cut, highlighting the need for a more longitudinal planning focus.<sup>24</sup>

With appropriate indicators and principles, STEGH stakeholders can then identify program limitations and ensure program sustainability and impact. Some academic institutions have faculty members living and working abroad; this can augment local bandwidth for supervision of HIC trainees and STEGH impact assessment. Community-based organizations providing STEGHs can also invest in local capacity building in conjunction with STEGH operations.<sup>50</sup> Focusing on sustainability also supports efforts to address the rise of chronic disease in LMICs.<sup>51</sup> STEGH preparation should reinforce training participants on the epidemiologic shift and an expanded definition of "tropical medicine" beyond infectious disease.<sup>52</sup>

## Applying STEGH principles: Focusing on community benefit

Applying these principles toward obtaining maximum benefit within host communities requires deployment of appropriate strategies across the entire spectrum of STEGH planning. These key strategies include assessment, data collection and dissemination, standards of quality, bidirectionality of agreements, formal curriculum definition, and ethical considerations.

**Assessment.** Existing professional groups should assess objectives, structure, monitoring and evaluation, cultural issues, and ethical concerns of STEGHs as they relate to medical education, as well as community impacts (both positive and negative). The American Public Health Association, American Academy of Family Physicians Global Health Workshop, Consortium of Universities for Global Health, and Network Toward Unity for Health are forums for this discussion. However, there is a need for increased focus on robust applications, which could include the use of assessment data to accredit STEGHs, develop uniform program standards (e.g., with respect to preparing trainees), and facilitate a paradigm shift that focuses on promoting participatory research and programming that prioritize elevating the voice and input of LMIC-based stakeholders.

**Data.** Professional organizations must take the lead in vetting STEGHs and providing this information to their members and the public. Internet searches reveal diverse STEGH opportunities, with no evidence on whether they conform to norms of practice. Although some organizations have created directories of STEGH programs, these are rudimentary and often lack sufficient information about program quality. This information gap also highlights the need for objective data on effective STEGH models that positively influence community health outcomes. Pouring resources into programs without transparency and quality improvement is not encouraged in any system. Effective deployment of online databases could allow the global health community to evaluate the ethics and sustainability of STEGHs. The first step to developing any such database would be for constituent stakeholders to

identify best practices for which data can be collected and analyzed against defined metrics, supported by medical education and global health funders.

**Standards.** STEGH practices should conform at minimum to defined quality standards established by regulators in the origin HIC, and must not be promoted as an opportunity to advance trainees' procedural skills or function clinically with reduced supervision. Local mentors of clinical activities during STEGHs should be compensated or otherwise recognized for their contributions to participants' education. Refinement of standards informed by data and assessment processes will act as a benchmark on which STEGHs can be measured. Programs that fail to meet expectations should not be supported by any stakeholder to continue without targeted improvements toward adherence with defined principles.

**Bidirectionality.** Identifying all stakeholders in STEGH opportunities is critical to avoid exacerbating existing inequalities within and between communities abroad, and between the host LMIC and sending HIC. Relevant models can be found in the community-based/community-driven<sup>53</sup> and community engagement<sup>54</sup> development literature. There should be explicit expectations by all parties through a memorandum of understanding, which should also include a timeline for sustainability, clarity of financial obligations and resource allocation, and mechanisms for conflict resolution.

**Curriculum.** Organizations and institutions sending trainees on STEGHs should define formal global health curricula, including competencies, predeparture training, on-site orientation, and cross-cultural effectiveness/cultural humility education for participants, along with robust postreturn evaluation and debriefing mechanisms.<sup>37</sup> Where possible, STEGHs should be embedded into broader international development efforts; this focus necessitates faculty development on community-based education principles.<sup>55</sup>

**Ethics.** At all times, STEGHs should respect local laws, and focus as identified by local community partners, and should remember that broader ethical principles extend beyond international boundaries.

## Conclusions: STEGHs Moving Forward

Growing interest in STEGHs should be channeled into interventions and programs demonstrated to be useful in improving global health and educating about complex determinants of health. To accomplish this improvement, the discourse around program implementation should refocus on STEGHs' impact on host communities, as well as the limitations of short-term trainee activities and necessity of longitudinal institution-level engagement. STEGHs must address, rather than perpetuate, underlying power imbalances, ethical pitfalls, resource differentials, and inequities that the global health movement seeks to eliminate. These principles must be consistently applied to capture the enormous potential of STEGHs to nurture globally engaged health professionals and institutional partnerships necessary to achieve global health targets and reduce health disparities locally and globally.

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