A Dis-Service? : Undergraduate Service-Learning in Global Healthcare Settings

Jessica Evert MD
Executive Director, Child Family Health International
Faculty, University of California, San Francisco, Department of Family and Community Medicine

Service-learning and educational experiences in global healthcare contexts in low and middle-income countries (LMIC) can be transformative and formative for participants (Drain, 2007). However, if conducted without a mindfulness of the risks associated with such activities, these experiences can potentially do more harm than good for many stakeholders, including participants, patients, local healthcare systems, and providers. The risks of poorly designed programs include, but are not limited to: 1. Harm to patients caused by students practicing hands-on medical care beyond their level of training 2. Disempowerment of local healthcare providers who are easily sidelined by visitors from the Global North 3. Harm to students in the form of moral distress, threats to health/safety, and ignorance of professional standards 4. Mischaracterization and oversimplification of 'global health.' To avoid being a dis-service, the unique challenges and opportunities of undergraduate service-learning in global health settings must be in the forefront of program design and execution.

Unique Setting, Unique Challenges

Healthcare settings, such as clinics and hospitals, are unique among experiential learning contexts for a variety of reasons. Much of their uniqueness stems from the gravity of circumstances and activities taking place within these

settings. Healthcare settings are where people who are concerned about symptoms, suffering from an illness, or worried about a loved one come to seek professional attention that they perceive as capable of diagnosis, treatment, and care. To maximize quality the ideal for professional healthcare providers in any community, whether in a high, middle or low-income country is extensive training, licensure, and professionalism (Sutherland, 2006). Not only does the skill level of a provider have repercussions for patient care, the cultural competency of providers actually affects health outcomes (Welch, 2000). Notably, in healthcare settings patients make certain assumptions about skill level and competency of an individual based solely on appearance. For example, a person wearing a white coat imparts trust and confidence and is often assumed to be a physician or other certified professional (McNaughton-Filion, 1991). In addition, these settings present unique safety considerations such as potential for exposure to infectious diseases and blood/body fluids.

The power dynamics within healthcare settings is marked by vulnerability of patients and their families (Irunita, 1999). This vulnerability and lack of power often limits patients' and families' ability to advocate for themselves, and precludes them from demanding a certain standard of care or standard of caregiver. The power imbalance between patients and healthcare providers in clinical contexts is compounded during service-learning experiences by the power differential inherent in the gaze of relatively privileged outsiders upon host community members (Camacho, 2004, Foucault, 1995).

The uniqueness of healthcare settings is also reflected in the distinct bioethical tenets that are operational in these settings. Four foundational bioethical principles are autonomy, beneficence, justice, and non-maleficence. Autonomy means that patients have the right to make an un-coerced, informed decision about medical care. Autonomy is the basis for 'informed-consent' where a patient is provided enough information on risks and benefits about a medical treatment to consent for or decline the treatment. Beneficence means health care providers have a duty to provide care that is beneficial for the patient. It is noted that "this principle is a the very heart of health care implying that [the patient] can enter into a relationship with one whom society has licensed as competent to provide medical care" (McCormick, 2013). Justice is defined as the fair distribution of limited healthcare resources within a society. Non-maleficence is better known as the edict "First Do No Harm." Non-maleficence requires that healthcare practitioners provide a standard of care that avoids or minimizes the risk of harm to the patient. It is the duty of healthcare settings and practitioners to ensure these principles are upheld by staff, visitors, students, and anyone who affects patient care. During service-learning programs, students' activities may embody or threaten these principles based on how the 'service' and 'learning' are structured.

Due to the unique attributes of healthcare settings, service-learning activities can be fraught with confusion and misinterpretation about the nature of and boundaries for "service" and "learning," particularly for undergraduate and pre-clinical professional students ("pre-clinical" refers to health science students who have not completed training in clinical settings at their home institutions). The most

visible and interesting activities (from a visiting student's perspective) undertaken in healthcare settings, including medical procedures, prescription and distribution of medications, surgeries, and examination of patients, are extremely enticing for students of all levels, especially those not previously involved with hands-on clinical care. Without appropriate boundaries set-up with all stakeholders, including students, sending institutions, host institutions, patients, faculty and supervising healthcare providers, students who are not yet qualified to do so, can find themselves and others interpreting the 'service' of service-learning as providing hands-on medical services and care to patients. When a student is doing so despite lack of training and educational level appropriate for hands-on clinical care it is not only unethical, but also a dis-service to students, patients and the field of international engagement (Holland, 2011). Such activities also break with professionalism norms and are increasingly recognized as undesirable by health professions communities. Dentistry is leading the movement to formalize such cautions to undergraduate students with American Dental Association (ADA) House Resolution 31H-2010 that emphasizes such activities are unprofessional and not a boon to dental school applications (ADA, 2011). Such mis-steps endanger the health of patients while reinforcing the incorrect notion that a sub-standard standard of care is acceptable for patients in poor, resource-limited settings, meanwhile perpetuating the same inequities that the field of global health is committed to eliminating (Fischer, 2013, Stoltenberg, 2012). Tellingly, in global health workforce planning there is no mention of visiting students from the Global North, of any trainee level, as a solution to scarce human resources in clinics and hospitals in LMIC's (Global Health

Workforce Alliance, 2012). Thus, it is important that students are not given the impression or act as if this is their goal during international experiences.

Impacts of Global Health Service-Learning

When conducted with a mindfulness to avoid pitfalls and create the structure necessary to engender transformative benefits, service-learning in healthcare settings can positively impact students, local healthcare providers, and patients. Elucidation of the benefits of participation in programs in global healthcare settings has focused primarily on trainees in undergraduate and graduate medical education. These activities are termed 'global health' education and/or service depending on the nature of the experience. Research has revealed gains in cultural sensitivity, appreciation of cross-cultural communication, the practice of medicine in a resource-conscious fashion, improved diagnostic skills for late stage and rare illnesses and appreciation of public health. Participation in these global health activities is related to an increased commitment to primary care and service to underserved populations locally and internationally (Bissonnette, 1994, Godkin, 2003, Haq, 2000, Bjorklund, 2011, Drain, 2009, Federico, 2006, Ozgediz, 2008, Haskell, 2002, Ramsey, 2004). Reflections by undergraduate students in global health service-learning programs demonstrate impacts including open-mindedness, cultural sensitivity, understanding the importance of listening to patients, and sense of connectedness with host communities (Brahm, 2012).

Furthermore, impacts on trainees and impressions about 'global health' appear to be related to program structure. Programs that are integrated into existing health systems, versus those associated with short-term brigades by foreign teams setting up temporary

clinics, having increased cultural, community health, and health systems learning outcomes (Rassiwala, 2013). In addition, there is a growing recognition of the distinction between volunteering and service-learning within healthcare contexts. Short-term volunteering, without a primary educational objective and curriculum, risks doing more harm than good, creating moral distress, and imparting a false sense of accomplishment on participants (Stoltenberg, 2012, Holland, 2011). Indeed, the ethics of short-term medical brigades, in general, have come into question (Bradke, 2009). Imbedding students into these short-term medical brigades or other primarily volunteer-oriented, Westerner-centric activities is known amongst critics as 'voluntourism.' These activities are contrasted with responsible international engagement and experiential education in global health (Seymour, 2012). Thus, not all international opportunities in health are created equal. In order to ensure participant benefit and reduce the likelihood of harms to host communities, the structure of such activities must be scrutinized.

Benefits for local healthcare providers in host communities appear to be contingent upon their inclusion in and centrality to the service-learning curriculum. Local physicians who mentor undergraduate and graduate service-learning participants report increased prestige, expanded sense of a global purpose and connectedness, broadened world view and communications skills, increased medical supply resources, and network building (Kung, 2013). Conversely, programs that ignore or sideline local healthcare providers risk decreasing their prestige and minimizing their centrality to healthcare provision in their own communities (Evert, 2011). The tension between Western-centric global health activities and those that empower local healthcare providers is echoed in this criticism by a physician from Sub-Saharan Africa who charges that global health is "a concept

fabricated by developed countries to explain what is regular practice in developing nations" (CUGH, 2008).

Benefits for patients in host communities are not well quantified or qualified. Indeed, when undergraduate university and pre-clinical health professions students participate in appropriate, restrained roles in clinical settings, the impact on patients' medical care should be expected to be minimal. One paradigm shift that is needed is acceptance that undergraduate and pre-clinical students will not have a major impact on the health of patients during short-term service-learning experiences. Currently, many students, schools and program providers possess or advertise a false sense of reliance on students to impact the health of patients during international experiential learning in healthcare settings. A paradigm shift toward humility and authenticity needs to occur. With such a paradigm shift, global health engagement would be viewed appropriately as a stepping stone process, where a great deal of learning transpires over an extended period of time before individuals become actors or impact patient's health (Evert, 2011). Such a stepping stone process would mirror the educational and experiential learning process that occurs in domestic clinics and hospitals, where it is unthinkable and against laws/regulations to have undergraduate or pre-clinical students provide hands-on patient care. In one study where undergraduate students were not in hands-on clinical or health education roles, but were 'general helpers,' no patients reported negative views of students. One patient reported "[Student involvement] is good because now they know…they can help the campaign." In the same study adequate supervision of medical and health professions students was commended by a patient who observed, "When a student does not understand something, he is able to ask another doctor in order to do the

right thing. For that reason, I feel good" (DeCamp, 2014). Importantly, being realistic about untrained, pre-professional students' impacts on medical care does not preclude other impacts for patients from being realized through non-clinical interactions between patients and students as well as benefits to the health system and healthcare capacity resulting from the partnership the student's experience is (ideally) imbedded within (Crump, 2010).

Pearls for Service-Learning in Healthcare Settings

Utilize best-practice guidelines for vetting and administering programs

Several sets of best-practice guidelines are applicable to undergraduate service-learning in healthcare settings. In 2013 the Forum on Education Abroad finalized the "Guidelines for Undergraduate Health-Related Programs Abroad" These guidelines establish program purpose as educational and observational in clinical settings, encourage community benefit alongside participants' gains, discuss logistical considerations for ideal communication and student preparation, as well as outline safety and ethical guidelines (Forum of Education Abroad, 2013). Forum's guidelines were informed by the work of the Working Group on Ethics Guidelines for Global Health Training (WEIGHT). These guidelines provide guidance for sending institutions, host institutions, trainees, and sponsors (Crump, 2010). Importantly, WEIGHT connects ethics to program operations, a critical practical translation of ethical ideals. The American Academy of Medical College's "Guidelines for Premedical and Medical Students Providing Patient Care During Clinical Experiences Abroad" bring a conversational tone to guidelines relevant in this area. These

guidelines may resonate with students and offer multiple angles of caution with regard to practicing clinically while abroad (AAMC, 2011).

Define undergraduate students' role as observational with regard to clinical activities

All three above-mentioned guidelines emphasize that students activities in clinical settings should be appropriate for their level of training. Tricia Todd MPH, of University of Minnesota's Health Career Center, clearly cautions advisees, "If you can't do it here, you can't do it there" (Todd, 2013). While most healthcare settings in LMIC's have not established extensive rules and regulations regarding undergraduate students in clinical settings, guidelines for hospital volunteers in the United States can start to shed light on boundaries for pre-professional/undergraduate students (AHVRP, 2012). Moreover, global health education and service-learning guidelines are clear on the observatory role of undergraduate/pre-professional students with regard to clinical care, medical procedures, and other medical professional activities.

Create appropriate opportunities for 'service' alongside clinical observation

The service component of service-learning during undergraduate health-related programs does not have to be non-existent because of the boundaries established around hands-on clinical care. Program providers and host institutions should identify appropriate service activities for participants. These may include administrative tasks, such as filing or organizing. It may include painting a mural on a hospital wall to make a ward more cheerful. Service may happen in a community-

based organization, allowing students to divide their time between observation in clinical settings and service within the community. The onus is on the program provider to create appropriate outlets for service and clearly delineate these from observation of clinical activities and medical services.

Embrace key ethical principles as foundational for program and participants

An ethical framework for students participating in programs in global healthcare settings includes four central principles: humility, solidarity, social justice, and introspection (Pinto, 2009). Humility has been defined as "unpretentious openness, honest self-disclosure, avoidance of arrogance, and modulation of self-interest" (Coulehan, 2010). One example of how students can operationalize humility is by disclosing their education level in plain language. Since labeling oneself as an "undergraduate" may lead to confusion due to different education systems around the world, the most honest self-disclosure is dependent on using clear language such as, "I am not yet in medical school. I have never had any training in a hospital or about medicines." Solidarity is the alignment of goals and values embodied in oneself and one's actions with those of the host community. Social justice is holding the view that everyone deserves equal rights and opportunities. In the context of healthcare social justice requires that one recognize the historically deep and geographically broad determinants of inequities, power imbalances, and underlying causes of ill health. Introspection is the honest self-reflection that is demanded to recognize one's embodiment or lack thereof of the other ethical principles and to facilitate reflection that is central to service-learning (Bringle,

1999). Case studies that view global health-related engagement through a variety of stakeholder perspectives can facilitate discussion about and understanding of these and other ethical principles (White, 2012). Although these tenets were suggested for trainees, they are also applicable to organizations, faculty, and others involved in administering service-learning programs.

Additional ethical principles that can be foundational for service-learning programs include veracity, respect for persons, mutual altruism, and transparency (Friedman, in press). Veracity is the duty to tell the truth. Truth-telling is essential on the part of program providers, as well as students. It should penetrate everything from program marketing to student-patient interactions. Respect for persons dictates a respect for others rights and implies that we do not treat others as a mere means to our end. In the context of service-learning in clinical contexts, this is exemplified by an untrained student declining to perform a medical procedure out of respect for the patient, even though the student would advance their clinical skills if they tried to perform the procedure. Mutual altruism is a contemporary definition of altruism that suggests seemingly 'altruistic' or self-less activities are actually bilaterally beneficial and an enlightened form of self-interest (Mendonca, 2011). This nuanced definition is important in service-learning programs where the 'service' component is often conceived of as a self-less act, but in reality provides a great amount of benefit to participants, from personal satisfaction to a boost on professional school applications. Transparency for both program administration and participants is complementary to veracity. It demands that we conduct ourselves in such a way that our actions and motivations behind them are apparent to other

stakeholders. An exercise can assist in uncovering motivations by categorizing them into motivations to which one aspires, one suppresses, and one tolerates (Philpott, 2010).

Ensure patient and participant safety

As mentioned there are unique health and safety considerations for both program participants and patients in clinical settings. With regard to student participants, they should be educated to take Universal Precautions that are necessary whenever there is a risk of exposure to blood and other bodily fluids. Even in observational capacity the risk of a splash exposure is considerable. Moreover, program providers should have procedures in place for post-exposure testing and prophylaxis in the event of an exposure to body fluids. Diseases transmittable through such exposures include HIV, Hepatitis B, and Hepatitis C.

Patient safety needs to be a key focus of program providers, as well as student participants. Indeed patient safety is a useful way to frame discussions of the risks and opportunities of health-related undergraduate service-learning. The University of Minnesota Health Careers Center created an open-access online workshop that does just this. Global Ambassadors for Patient Safety (GAPS) is a series of educational modules that concludes with an oath taken by students that pledges they will be ambassadors for patient safety when abroad (University of Minnesota, 2013). In addition, this oath can be printed and carried by students in-country. When students are invited to take part in hands-on activities that exceeds their level of training, the printed oath is a formal way for students to demonstrate that they are

'not allowed' to do the hands-on activity. In this way students are able to say "no, thank you" with back-up from written documentation that relinquishes ownership over the decision. This relinquishment helps take any impressions on behalf of the student or host institution that the student is a 'let down' or somehow not eager.

Aim for broad learning objectives and competencies

To do justice to the complex determinants of health globally, programs should include program content, learning objectives and competency-based education that goes beyond the myopic lens of clinical medicine. It is estimated that healthcare is only 10% of what influences individuals' health status and longevity (Schroeder, 2007). Social determinants of health, political stability (or lack therof), environment, socioeconomic status, education, gender, and much more have great influences on health and wellness.

In addition to broad determinants of health, it is increasingly recognized that inter-disciplinary approaches are necessary to solve health challenges globally. The definition of 'global health' reflects this inter-disciplinary nature (Koplan, 2009):

> Global health is an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide. Global health emphasizes transnational health issues, determinants, and solutions; involves many disciplines within and beyond the health sciences and promotes interdisciplinary collaboration; and is a synthesis of population-based prevention with individual-level clinical care.

Likewise programs should have broad learning objectives and diverse program content to present a realistic and appropriately inclusive impression of the determinants of health. The Global Health Essential Core Competencies provide an example of learning objectives that go beyond clinical practice (GHEC, 2009). Although designed for medical education, the non-clinical competencies lend themselves to guiding undergraduate health-related service-learning program curricula (Figure 1). Peluso and colleagues (2012) suggest a competency structure that includes general core competencies that are universal despite the location of the international experience and local core competencies that reflect the geopolitical, historical and health systems reality of the host community. These medical education competencies and competency structure are informative for undergraduate service-learning curriculum.

Figure 1: Global Health Essential Core Competencies for Medical Education

Knowledge Domains	Competencies
Global Burden of Disease	• Knowledge of the major global causes of morbidity and mortality and how health risks vary by gender and income across regions. • Be able to knowledgeably discuss priority setting, healthcare rationing and funding for health and health-related research.
Health Implications of Travel, Migration, and Displacement	• Understand health risks associated with travel, with emphasis on potential risks and appropriate management, including referrals. • Understand the health risks related to migration, with emphasis on the potential risks and appropriate resources. • Understand how travel and trade contribute to the spread of communicable diseases.

Social and Economic Determinants of Health	• Understand the relationship between health and social determinants of health, and how social determinants vary across world regions.
Populations, Resources, and the Environment	• Understand the impact of rapid population growth and of unsustainable and inequitable resource consumption on important resources essential to human health including water, sanitation and food supply and know how these resources vary across world regions. • Describe the relationship between access to clean water, sanitation, and nutrition on individual and population health. • Describe the relationship between environmental degradation, pollution and health.
Globalization of Health and Health Care	• Understand how global trends in healthcare practice, commerce and culture contribute to health and the quality and availability of healthcare locally and internationally • Be familiar with major multinational efforts to improve health globally. • Understand and describe general trends and influences in the global availability and movement of healthcare workers.
Healthcare in Low Resource Settings	• Identify barriers to health and healthcare in low-resource settings locally and internationally. • Demonstrate an understanding of healthcare delivery strategies in low-resource settings, especially the role of community-based healthcare and primary care models. • Demonstrate an understanding of cultural and ethical issues in working with underserved populations. • Demonstrate the ability to adapt clinical skills and practice in a resource-constrained setting. • For students who participate in electives in low-resource settings outside their home situations, demonstrate that they have participated in training to prepare for this elective.
Human Rights in Global Health	• Demonstrate a basic understanding of the relationship between health and human rights.

Conclusion

Undergraduate service-learning in global healthcare settings must be undertaken thoughtfully to avoid inadvertently being a dis-service to learners, host communities, and the field of international education. It requires appreciation of the risks and opportunities unique to clinical contexts. The onus is on international educators, advisors, and program administrators to ensure students are participating in experiential learning in a way that prioritizes educational goals and provides appropriate outlets for hands-on service. As Brittany Seymour and colleagues (2012) emphasize, "[It is the responsibility of] educators to enable students to critically evaluate volunteer opportunities and to distinguish potentially harmful voluntourism from responsible activities based on global health principles." Global health principles require the service-learning community to ensure programs do not covertly or overtly perpetuate the differential treatment of impoverished patient populations and communities in LMICs. Doing so perpetuates the very global inequities that we aspire to address.

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