Ethical Challenges and Considerations of Short-Term International Medical Initiatives: An Excursion to Ghana as a Case Study

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INTRODUCTION

Medical students, physicians, nongovernmental organizations, and military personnel have participated in short-term international medical initiatives for decades. The increased ease of transport and interest in international endeavors have only served to increase the numbers of people traveling and locations visited. In fact, by 2004, 22.3% of US medical students had completed an international educational experience,1 and by 2008, 47% of accredited MD-granting medical schools had established initiatives, centers, institutes, or offices of global health.2 Furthermore, the field of emergency medicine has also seen a recent burgeoning of international interest, research, and collaborations accompanying the development and recognition of the specialty in more than 30 nations.3-7 Ethical quandaries frequently pervade the practice of medicine in the developing world by visiting medical personnel and are exacerbated by factors inherent in what are frequently brief stays. Efforts to discuss the ethical challenges of short-term international medical assistance thus far have been relatively sparse. This article will focus on the ethical subtleties that underlie our well-intentioned actions abroad, through the lens of a recent excursion to the eastern region of Ghana. Examples of ethical challenges that will be explored in the following pages include the difficulties of obtaining consent and administering appropriate medical interventions in the setting of language and cultural differences, the challenges of using limited or “substandard” medication or equipment in austere resource-poor environments, the possibility for harm when treatments are provided without opportunity for follow-up, the normative importance of pursuing sustainable projects, and the risks of allowing amateurs or trainees to practice medicine without the same oversight they would have within the United States.

Suchdev et al8 put forth a model for sustainable short-term international medical trips that identifies the following 7 areas of focus: developing a clear mission, collaborating with the local community, educating travelers and the local community, making the commitment to serve the needs of the community, engaging in teamwork, having sustained capacity building, and developing a mechanism of periodic evaluation. Building on the model by Suchdev et al,8 this article provides further detail and additional guidelines that should be considered before each international medical initiative, including effective communication and cultural sensitivity, contextually relevant use of resources and triage, the avoidance of chronic care medicine and elective surgery without appropriate follow-up, a focus on sustainability, and the importance of humility and oversight.

PRINCIPLES OF BIOMEDICAL ETHICS

In any conversation concerning biomedical ethics, it is important to recognize 4 major principles: respect for persons, beneficence, nonmaleficence, and justice. These principles derive from “a set of moral norms that bind all [morally serious] persons in all places.”9 They serve as the basis for US federal regulations governing the treatment of human subjects, as well as for internationally recognized documents, including the Belmont Report, the Declaration of Helsinki, and the Council for International Organizations of Medical Sciences International Ethical Guidelines for Biomedical Research Involving Human Subjects.10 Principlism provides a practical framework with which to evaluate moral problems. They are not absolute rules, but rather act as prima facie obligations. Accordingly, each of these obligations must be fulfilled unless an equally important competing obligation outweighs it in the pursuit of the “'greatest possible balance' of right over wrong.”9 It is important to acknowledge that reasonable and
Conscientious people may disagree on how best to interpret these principles. Equally important during such disagreements is a serious attempt at respectful resolution through reasoned argument. I will attempt to critically assess the ethical challenges of short-term medical initiatives in developing countries by examining the challenges of providing care during a recent medical initiative to Ghana.

**CHALLENGES TO ETHICAL CARE**  
**Culture and Language**

Communication breakdowns and cultural differences are ubiquitous. Indeed, there are more than 46 million people in the United States who do not speak English as their primary language; this population is less likely to receive the care they need, is less likely to be compliant with treatment regimens, is at greater risk of experiencing medical errors, and has been the subject of recent calls for research to more rigorously understand how language affects care. Similarly, participants in short-term medical initiatives have a responsibility to become as familiar as possible with local cultural norms and traditional understandings and practices of healing and to establish an effective method of communication before traveling and treating patients. Without an emphasis on cultural competence, medical providers may place the ethical principle of nonmaleficence in jeopardy because miscommunication and misunderstanding may lead to patient harm. In addition, respect for persons calls on providers to acknowledge and honor a patient’s ability to consent for treatment, which may be impossible without an interpreter. Furthermore, awareness of a culture’s beliefs and practices is important to the concept of beneficence because it fosters an environment of trust and mutual respect, which may translate to better compliance and greater effectiveness of medical treatment. It is impossible to eliminate all potential miscommunication and misunderstanding, regardless of geographic location, patient population, and linguistic skill. The goal, rather, is to allay those challenges to the greatest extent possible.

In 2008, 5 other medical students and I spent 2 weeks on a hospital ship staffed by Ghanaian medical personnel from the Volta River Authority Hospital in Akosombo. The services provided by this boat are part of an ongoing commitment by the Volta River Authority, started in 1990, to provide acute primary care and education free to relatively isolated communities around the Volta Lake without ready access to hospitals or clinics (the Volta River Authority is a hydroelectric power utility company that has engaged in social and health endeavors aimed at mitigating the effects of the company’s presence on the surrounding environment and inhabitants).

Although English is the “official” language of Ghana, there are 79 spoken languages in a country that is approximately the size of Oregon. Around the Volta Lake, the most common languages we encountered were Ewe, Twi, and Ga, whereas very few people spoke English. Because the hospital ship had been operational since 1990, the local staff was familiar with the language and cultural practices of the local communities we visited. Meetings with the village chief on arrival to each village were cultural interfaces critical to obtaining consent to hold the clinic and treat willing patients the next morning.

The ability to communicate is essential to any international medical initiative and served as a significant barrier in our interaction with the local population. Despite significant efforts to mitigate communication barriers, the situation posed an ethical challenge. Although we were able to navigate certain cultural norms and rituals, our lack of knowledge of local traditional practices of healing could have been problematic and harmful. *Prunus africana*, yohimbine, and various hepatotoxic alkaloid herbal remedies are known biologically active substances present in Africa that could be a potential cause of a patient’s symptoms or could interact or otherwise interfere with the medications they receive. Moreover, the language and translation difficulties encountered may have easily led to inappropriate use of medication or misinterpretation of symptoms and concerns.

Recommendation: Before departure, establish an effective method of communication and become familiar with cultural norms and practices of healing.

**Lack of Adequate Time and Resources**

Short-term international medical initiatives are often conducted in austere, resource-poor settings in which it is impossible to devote the full extent of available resources to every individual. Though generally considered in the context of disaster response and the emergency department, triage is also an important tool during short-term medical initiatives. Because the principle of justice obligates medical personnel to consider medical utility and prospect of success as important factors in their decisions about how to allocate scarce resources, it is necessary to develop a system that identifies patients by their medical needs and likelihood of benefit. There are many proposed approaches to triage, but common among them all is the utilitarian notion of doing the most good for the most people. This ethic satisfies the formal principle of justice: “treat similar cases similarly and equals equally.” Additionally, this concept of justice also validates the actions of providers who offer the best possible care with available medications and equipment, though existing resources may be considered substandard to what is available in the more developed world.

The realities of practicing medicine in rural, isolated communities with limited resources and capabilities were strikingly evident during our time in Ghana. One clear truth quickly emerged: the medical ship could only deliver care with the materials and medications that were stocked before departure. Because the stock was limited, the pharmacist divided it by the number of villages on the itinerary. In addition, the staff would pack up the clinic, leaving some patients untreated, because it was important to have adequate
time for travel and obtaining consent from the chief of the next village. Because there exists just 1 medical ship that is able to visit the same village only twice in 5 years, its arrival draws a large crowd of people and potential patients at every destination. There was no formal system of triage on the ship. Although those who were in greater need tended to present early, the mere fact the ship had to leave certain villages with patients yet untreated was problematic. The “first come, first served” rule by which the clinic operated had the potential for injustice because it implied that those who were already receiving treatment had priority over those who arrived later but who had more urgent medical needs.9 As a result, it was ethically dubious to evaluate throngs of patients with exercise-induced musculoskeletal pain, only to have left later-arriving patients with more dangerous and treatable conditions such as malaria and intestinal parasitic infections without appropriate treatment.

Recommendation: Resources ought to be contextually relevant to the medical conditions of the local population and delivered to those with the greatest medical need and likelihood of benefit.

**Chronic Care and Elective Surgery**

Good intentions alone do not ensure success, nor do they provide sufficient ethical justification for international medical efforts. For example, it is not clear whether the benefits outweigh the potential harms of chronic disease management in the acute setting without long-term continuity. Tuberculosis and HIV are conditions that require complex care and a high degree of patient compliance with therapy during long periods, without which efforts to treat individuals threatens to produce resistant organisms that endanger not only the individual patient but also the local community exposed to the individual’s infection. Although community-based treatment of tuberculosis in resource-poor settings has been successful, it involves direct observational therapy for a period of several months.20,21 Furthermore, nonemergency surgery without the possibility of continued follow-up presents a similar ethical concern. Referencing international ventures for fistula repair, Wall et al22 wrote the following: “You have a moral obligation as a surgeon to insure that your patients receive appropriate post-operative care. . . . It is unethical to perform complicated reconstructive operations only to have them fall apart because patients do not receive appropriate ongoing attention after you have gone.”

The principle of nonmaleficence, often phrased as the obligation to “do no harm,” is clearly applicable in the preceding examples. Many medical initiatives regularly focus on what sorts of care they will provide and how they will provide it. Equally imperative, however, is the care physicians should not offer their patients.

The medical ship on the Volta Lake appropriately addressed acute primary care needs and largely avoided the provision of care for chronic medical conditions and nonemergency surgical procedures. No patients were tested or treated for tuberculosis or HIV, and no surgeries were performed. There were, on occasion, patients with obvious disease that could not be treated with the resources and personnel on the ship. Jaundice, cataracts, and inguinal hernias are examples of conditions relatively common in the communities we visited. Without the ability to conduct diagnostic tests or provide necessary follow-up care, these patients were told to proceed directly to the nearest hospital. The nearest hospital, unfortunately, was many hours or days of travel away from those villages.

Recommendation: Without the ability to provide long-term follow-up care, avoid chronic care medicine and elective surgery.

**Sustainability**

Historically, the success of international short-term initiatives has been measured by the “body count,” or number of people treated during a visit.23 The communities served, however, will require the health services provided long after their visitors leave the country. The principle of beneficence is understood as an obligation of medical providers to maximize possible benefits and minimize harms.16 Consequently, a more rational and beneficient approach to serving communities in the developing world should involve teaching and training community members and local health care workers the skills required to provide necessary services in the absence of foreign medical assistance. If, in fact, the focus of international medical initiatives is the assistance of local communities, rather than the experience of those who visit those communities, then every initiative should devote some effort toward sustainability.24 The Ghana Postgraduate Obstetrics/Gynecology program is a tremendously successful example of a collaboration between 2 Ghanaian medical schools, the Ghana government, and the American College of Obstetricians and Gynecologists and Royal College of Obstetricians and Gynaecologists (among others), to address the dearth of trained obstetrics/gynecology physicians in Ghana.25 As of November 2006, 37 of 38 specialists who completed the program continue to serve Ghanaian communities.26

Although the postgraduate program in Ghana is an example of an internationally supported and sustainable effort, small-scale efforts during short-term medical initiatives are also possible. For instance, academic institutions will often have ongoing relationships with particular international sites, to which teams of medical students, residents, and faculty are sent annually. Within this context, local community members may be trained in specific skills required to address relevant and prevalent community health concerns in the absence of outside assistance, with follow-up and reinforcement on each successive visit. Additional examples are provided by the Ghanaian personnel on the medical ship, who provide an educational session at every village to instruct local populations on methods to improve hygiene, on how to avoid aquatic parasites and malaria infection, and about birth control and condom use.

Recommendation: Every initiative should include a focus on sustainability, such as the transfer of relevant skills or education,
to extend benefits beyond the presence of foreign medical assistance.

**Delivery of Care by Nonlicensed Personnel and the Need for Oversight**

Medical licensure grants a person the authority to practice medicine within a geographic area; it also attempts to protect patients by ensuring that all medical personnel are qualified, competent practitioners. Recent discussion has highlighted the difficulties and concerns with using untrained volunteers to deliver care and medications in the international setting. International humanitarian volunteers may have various levels of medical education or none at all. Medical students, depending on the number of years of education, will also vary in their knowledge and level of competence, and although medical students have various roles within hospitals in the United States, they act with the guidance and oversight of licensed residents and attending physicians. Even licensed physicians are not trained to deliver all types of medical care. A physician who completes a residency in internal medicine, for example, is not trained to perform vascular surgery. Licensure by itself does not guarantee competence or patient protection.

Medical personnel in resource-poor locations are subject to the same ethical principles that they would be in more developed affluent countries. In addition to treating individuals as autonomous agents, the principle of respect for persons requires the protection of populations with diminished autonomy. A corollary to the idea of diminished autonomy in medical decisionmaking is the infringement on autonomy presented by a lack of choice. Many communities in the developing world are confronted with the lack of alternative health care and a high prevalence of dangerous infections, which each contributes to the absence of reasonable choice. Licensure and oversight are important because they serve as protections against unethical conduct. Although not always practical, to the extent possible, short-term medical initiatives to the developing world should incorporate personnel that are both licensed and trained in the particular skills necessary to deliver the care that is relevant to a community.

On the Volta Lake, an experienced nurse practitioner provided guidance and oversight for all medical personnel. With the assistance of an interpreter, medical students treated patients with relative independence when staffing one of the 3 general medicine tables. The nurse practitioner served as a sounding board for questions concerning conditions about which the medical students had concerns or did not know how to treat. In addition, she reviewed our diagnoses and treatment plans each evening to ensure appropriate clinical rationale and submitted an evaluative report to the director of Health Services of the Volta River Authority, who was responsible for all visiting health service providers. Nurse practitioners have been used with increasing frequency in the United States and Ghana in a variety of settings to address primary care needs of underserved populations, including children, women, migrant workers, the homeless, and the elderly. Given the scope of the primary care services delivered by the medical ship on the Volta Lake, the presence of a nurse practitioner as lead health care provider was appropriate and may, in fact, be important to the long-term success and sustainability of the ship’s monthly excursions.

Recommendation: When faced with an emergency or austere situation in which medical demand outstrips available resources, physicians, medical students, and volunteers alike must have the humility to recognize their limitations and tailor their actions accordingly.

**CONCLUSION**

Increasing numbers of people are participating in short-term international medical initiatives. These efforts have been successful in providing much-needed medical services to populations with little to no access to health care. These well-intentioned participants face significant ethical challenges and are still without a systematic and practical ethics framework to address these issues. This article seeks to contribute to the discourse through examining 5 major ethical considerations and then proposing several avenues through which to conduct ethical global medical outreach, using a recent excursion to Ghana as a case study.

Regardless of the difficulties that face short-term international medical initiatives, the need for such services is enormous. To face this challenge, we should strive to nurture and encourage interest in international health, including its implementation through ethically appropriate short-term international medical initiatives. Not only does the potential for direct benefit exist for populations in resource-poor areas but also international health experiences positively affect participants’ knowledge, skills, and attitudes and may have a role in recruiting and influencing residents to choose careers in primary care and underserved settings. With appropriate ethical consideration, international medical initiatives may contribute to the development of self-sustaining, long-term
improvements in health care access and the reduction of growing health disparities concentrated in the developing world.

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REFERENCES


**CORRECTION**

In the November 2009 issue, in the article by Vaillancourt et al (“The Out-of-Hospital Validation of the Canadian C-Spine Rule by Paramedics,”; pages 663-671), the first section of the Editor’s Capsule Summary is incorrect. It should have said, “What is already known on this topic: Previous out-of-hospital studies indicate that selective spinal immobilization may miss patients with cervical injury.” We apologize for the error.