Perspective
Short-Term Global Health Research Projects by US Medical Students: Ethical Challenges for Partnerships

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Abstract. Recent interest in global health among medical students has grown drastically, and many students now spend time abroad conducting short-term research projects in low-resource settings. These short-term stints in developing countries present important ethical challenges to US-based students and their medical schools as well as the institutions that host such students abroad. This paper outlines some of these ethical issues and puts forth recommendations for ethically mindful short-term student research.

INTRODUCTION

Recently, interest in global health among US-based medical students has exploded, and increasing numbers of students are traveling to low-resource settings for clinical and research electives.1,2 One study showed that trainees who have such experiences are more likely to care for impoverished patients in the future and that some may have even changed the focus of their clinical training from subspecialty medicine to general medicine as a result of their time abroad.3 Another study documented an increased interest in volunteerism, humanitarianism, and public health among students who participated in an international elective; however, more research is necessary to truly understand the effects of international experiences on medical trainees.4 Furthermore, although there is some evidence that these experiences positively contribute to the professional development of medical students, there is no evidence that the patients involved in research by these trainees derive any benefit from these programs. Sending students to developing countries for short-term research experiences brings additional layers of complexity to an already ethically fraught situation.

In this paper, we explore some ethical concerns that are raised by medical students traveling to low-resource settings for short-term research projects. The first, of course, is the question of whether to offer this opportunity to students. Sending a student abroad for a short time (2–3 months) is exorbitantly expensive, and in most cases, it is unlikely to result in the generation of a significant amount of new and valuable scientific knowledge. Ideally, students desiring international research experience should seek funding for a full year abroad, allowing them significant time to devote to the project. In some circumstances, however, students cannot take an extra year in school, and for some students, short-term experiences can be invaluable. Students who plan to spend their careers in global health must have some opportunity to train in low-resource settings. These programs should be presented as a privilege and be highly competitive. Selected students should be held to the highest possible standards of academic performance and personal character, and preferably, they should possess previous research experience in the United States. Interested students’ motivation for pursuing such short-term research experiences should be evaluated using a student essay as well as an interview with a team of faculty, administrators, and students with prior global-health research experience. Students should be trained in research methods as well as research ethics and Internal Review Board (IRB) issues before their departure for such experiences. We have instituted such a process as part of our more than 40-year-old Wilbur Downs Student International Health Research Fellowship (the student authors are former recipients of this fellowship and the faculty authors all serve or have served on the selection committee for this fellowship).

Through a series of vignettes based on the international research experiences of the student authors of this paper, we propose that the most ethical manner in which students can engage in such research is through a highly comprehensive, collaborative, bilateral partnership between the US medical school and the host institution in the destination country. Several US educational institutions have developed such institutional commitments with international partners.5,6 The goals of these partnerships range from preserving the lives of vulnerable populations to capacity building to research collaborations.7 Importantly, such partnerships must have a mandate for sustainable capacity building and strengthening of the resources available at the host site, because this can enhance the health and wellbeing of some patients.8 Ideally, one aspect of such collaborations would be funding for medical trainees and professionals from the host institution to rotate at the US institution, for the promotion of personal and professional development rather than promoting brain-drain. We assert that sending medical students to developing countries for short-term research projects within the context of such partnerships may help to alleviate some of the ethical problems that we discuss below. We also offer some guidelines for schools to follow in promoting ethical short-term student research in developing countries.

BURDENS ON THE HOST

Qing received an international research fellowship from her medical school. The Liberian physician sponsoring her spent hours assisting with the paperwork for her visa, arranging accommodations for her, and hiring a car to pick Qing up from the airport. Qing faces a series of logistic problems in setting up the study, and it takes longer than anticipated to get her research underway. Qing’s sponsor spends 1–2 hours per day away from...
patient care to help her mitigate these difficulties, which disrupts the clinic and causes irritation among the clinic staff.

Medical students face many difficulties in performing short-term research in low-resource settings. These challenges range from negotiating cultural and linguistic barriers to logistic questions such as where to obtain materials that may be required for the study. Already overburdened local staff may be forced to expend significant amounts of time and energy to orient student researchers and assist them with these problems rather than focusing on serving their patients, as occurred in this vignette. As Crump and Sugarman rightly point out, these impositions on a health system that is already strained by a lack of resources may cause tension between the host and the sending institution and make such research projects ethically questionable. Furthermore, host institutions may be hesitant to address concerns with the wealthier, sending institutions and the sending institution and make such research projects appropriate deflection of local human or material resources existing disparities are not more deeply entrenched by inap- propriate deflection of local human or material resources away from the health care system in the host country towards the research project.  

Medical students from the United States and their medical schools have the ethical responsibility to critically assess whether a research project may cause harm by necessitating the diversion of material or human support from the host institution. Many of these impositions may be alleviated through a long-term relationship between the two bodies. Benatar and Singer have also discussed this phenomenon, and they have suggested that one requirement for ethical international health research should be “ensuring [that] existing disparities are not more deeply entrenched by inappropriate deflection of local human or material resources away from the health care system in the host country towards the research project.”

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The issue of informed consent presents a great challenge to all researchers, not only student researchers carrying out short-term projects. It is accepted practice in international research to solicit IRB approval from both the host institution at the site of data collection and the collaborating institution in the United States. In some countries, a national regulatory body further oversees biomedical research, and so, researchers must be aware of host-country national guidelines for research approval. It is further expected that the IRB review include an examination of the informed consent process for the proposed study.18 Given the history of Western researchers exploiting vulnerable subjects, researchers rightly continue to analyze factors influencing the process for obtaining informed consent from research subjects in low-resource settings.17 Part of the ongoing challenge, as is clear in Amit’s situation, is how the informed consent process can be translated from the theoretical and abstract domain of Western academic institutions (where much of the research performed in the developing world originates) to the realities of the field. As Benatar18 suggests, informed consent must be obtained “within the linguistic and cultural framework of research subjects” to function as desired.18

In this vignette, Amit is witnessing a violation of informed consent, and data in the study described would be unethically obtained. If Amit’s medical school were involved in a standing collaboration with his host institution in Peru, this sort of situation could more easily be avoided and resolved. The hosting institution would receive compensation for the time that the advisor spent working with Amit on the study, thus freeing scarce resources to assist students in trouble-shooting problems as described above. Furthermore, in such a partnership, Amit’s advisor in the United States would have familiarity with the specific logistical and cultural barriers to informed consent that may exist in the host country, thereby allowing him to serve as a true resource for the student researcher. Additionally, any comprehensive partnership should include pre-departure training for US-based medical students to prepare them to grapple with such ethical questions, should they arise, as well as cultural sensitivity training and if possible, even language training. Ideally, the collaborating institutions should arrange for individuals from the hosting institution to travel to the United States and facilitate such trainings for US-based students and faculty.

CONCLUSION AND RECOMMENDATIONS

The tremendous growth in interest in global health among US-based medical students is heartening, considering the immense challenges that face the global public-health community. Many US-based medical trainees would benefit significantly from opportunities to do research in resource-poor settings, where many of these aspiring physicians hope to eventually provide care to patients, cooperate in the provision of public-health measures, and indeed, perform research in their future careers. If these students could work in collaboration with medical students and medical professionals from their destination communities, these programs could not only serve US-based medical students but also the destination community and build increased capacity for health-care delivery.

US-based medical students and medical-school administrators must be cognizant of the complex ethical issues that short-term research projects present. We, therefore, present recommendations for medical schools that send medical students to perform short-term research in resource-poor settings (Table 1). Developing longstanding partnerships can assist US-based medical schools and medical students to ensure that these experiences are both meaningful and ethical. A long-term collaboration between partner institutions, in which the two parties grow to have a deep understanding of one another’s culture and values, can help medical students mitigate ethically suspect situations and prevent students from having to deal with difficult ethical questions on their own. Furthermore, if the two parties are truly equal partners from the outset of a research project, both partners can amicably and ethically negotiate the grey areas that will inevitably come about when the project is underway.

Received November 19, 2009. Accepted for publication March 24, 2010.

Acknowledgments: The American Committee on Clinical Tropical Medicine and Travelers’ Health (ACCTMTH) assisted with publication expenses.

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