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Global Health Experiences for Pre-medical Students

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Abstract
Pre-medical students are engaging in global experiences to garner more clinical experience and to augment their resume. These students are raising a new set of ethical issues that have not been adequately addressed. Students are thrust into roles that require a working ethical and professional knowledge in the standards of medicine even before they enter the profession. Selecting competent pre-medical students, creating a thorough pre-departure curriculum, creating a responsibility checklist that corresponds to a student's level of training, and defining "trainable" skills for unskilled volunteers are some ways mitigate the ethical issues.

Keywords: *Global Health Experiences, Pre-medical Students*

1.0 INTRODUCTION

Global health experiences are common among health professional students. US medical schools increasingly offer medical electives abroad to respond student demand for global experiences[1]. These experiences are intended to develop students' compassion, volunteerism, and interest in serving under-served populations[2]. Meanwhile, the rationale is that they will simultaneously serve the communities in which they work. Although addressing global health disparities is commendable, a number of ethical concerns have surfaced. The Working Group on Ethics Guidelines for Global Health Training (WEIGHT) recently published guidelines addressing such concerns. It is intended for trainees and institutions to develop ethical practices in resource-poor settings[3]. Further efforts such as online tutorials (ethicsandglobalhealth.org) are underway in an effort to implement the guidelines[4].

Global health experiences, however, are no longer exclusive to health professional students. Pre-health students are driven by pre-professional preparatory culture, which promotes engagement in global health experiences. Pre-medical students in global health settings raise a variety of ethical concerns. In this article, I evaluate global health trips taken by pre-medical students to convey the heightened potential for professional and ethical standards to be crossed. I conclude by suggesting ways to mitigate such ethical concerns.

2.0 IMPULSE FOR GLOBAL HEALTH EXPERIENCES

Students are under pressure to gain admission to medical schools. In response, students are seeking experiences to differentiate themselves. They are engaging in international medical-service trips to reach-out to a community, to demonstrate their commitment to global health[5], and to ultimately increase their chances for medical school admissions.

3.0 ETHICS DILEMMAS IN GLOBAL HEALTH FOR PRE-MEDICAL STUDENTS IN CLINICAL MEDICINE

It should be evident that pre-medical students are neither physicians nor medical students. Their lack of medical training is a source of undue risk to themselves and to those within the community. Moreover, the amount of resources necessary to train pre-medical students is a diversion of resources from local clinics. In resources-poor settings, training clinical skills to short-term volunteers requires effort from the staff, distracts them away from their patients, increases waiting-time for patients, and potentially reduces the number of patients seen in a day.

Given the strenuous conditions of these global health experiences, the ability for pre-medical students to assist and for physicians to work deteriorates. For instance, students are not in the position to decline a superior's request for help. Likewise, pressures from being short-handed may force physicians to use pre-medical students. In some cases, I have noticed students overestimating their potential and pressuring clinicians for more hands-on clinical responsibilities. In these instances, clinicians face financial and fiduciary obligations from sponsoring volunteer organizations[6]. This conflict of whether to abstain from training pre-medical students or to decline aid compromises a physician's professional duties.

4.0 ETHICAL FRAMEWORK FOR PRE-MEDICAL STUDENTS

Having stated some of the ethical dilemmas raised by pre-medical students, it is important to evaluate how these issues compromise the ethical and professional principles of medicine. Beauchamp and Childress proposed patient autonomy, beneficence, nonmaleficence, and justice as the core principles of biomedical ethics[7]. However, the universality of the principles has been an issue of much scrutiny[8,9]. For instance, in Western countries, patients have

autonomy over their health. In other countries, the concept of patient autonomy can be impractical and the physician is expected to act as a beneficiary and make clinical decisions on behalf of his or her patients. What the US constitutes as "justice" differs from that of other societies. Pinto and Upshur introduced humility, introspection, solidarity, and social justice in an effort for a broader ethical framework for global health[10]. Even though a universal ethical framework for global health may not be possible yet, Beauchamp and Childress's principles along with Pinto and Upshur's can form the beginnings of a framework to evaluate the role of pre-medical students on global health trips.

4.1 Autonomy[7] and Trust

Patient autonomy in the West is a blend of rational and empirical thoughts that allow patients to determine their own outcomes[10]. However, in some societies, patients entrust physicians to make clinical decisions on their behalf. When physicians in these societies are understaffed, they might rely on untrained students to undertake critical clinical responsibilities. As a volunteer, I have watched my peers suture, prescribe medications, and assist in surgery. We did not hesitate in fulfilling our assigned clinical roles as we were too immersed in the world of medicine to decline such experiences. However, unsupervised care by students like us could lead to inadvertent and dangerous mistakes. These mistakes could strain the physician-patient relationship, leading the community to doubt the competency of foreign physicians, thus causing unnecessary tensions between the local physician(s) and their community. Resultantly, the critical ability to build a long-term relationship between local physician(s) and their community is lessened, ultimately destroying the trust between physician(s) and a community[11]. Patients can easily confuse students donning stethoscopes and navy-blue scrubs for medical students or trained physicians. It is critical for students to clarify to patients that they are volunteers and not medically-trained professionals. Moreover, pre-medical students should be prohibited from wearing scrubs or a white coat to prevent such misunderstandings. These precautions would minimize the medical requests by patients to volunteers.

4.2 Nonmaleficence

The principle of nonmaleficence is associated with *primum non nocere* – "first, do no harm."[7] When physicians working with short-staffed clinics entrust critical clinical responsibilities to volunteers, they are indirectly endangering patients. Such unsupervised medical care by pre-medical students must be avoided. In resource-poor settings, the physicians might be financially obligated by volunteer agencies to abide by students' requests in exchange for monetary benefits to the clinic. If such exchanges are not limited to experiences that correspond to a students' level of training, students could pose a tremendous danger to patients. Regardless of financial and fiduciary obligations, the physician has a professional obligation to put his or her patients' interests and safety over providing volunteers with "good" clinical experiences[12].

4.3 Humility

Humility is essential for students to understand the cultural differences[10]. It allows them to acknowledge differences in the provision of care, respect patients' wishes, assess the needs of the clinic, and in realizing their role as foreign pre-medical students. When students undertake clinical responsibilities, they need to assess their scientific knowledge and clinical skills before fulfilling the task[10]. Some students may have certifications in Emergency Medical Training (EMT), Nursing Assistance (CNA), etc., and are able to provide some level of care. However, students need to acknowledge their own limitations, to not overestimate their potential, and to not pressure staff for more hands-on experiences. Students need to realize that global health work is not a way for them to obtain clinical experiences, but rather, to appreciate differences in providing healthcare. This aspect is critical to developing a new generation of physicians knowledgeable in beneficial healthcare not provided in the US.

4.4 Honesty

Honesty is a critical and integral component in global health experiences. For instance, medical school in United States is a graduate degree whereas in other countries it is an undergraduate degree. In their hectic roles, physicians could easily confuse a pre-medical student for a medical student, assigning him or her responsibilities that are beyond his or her skill level. However, the responsibility ultimately lies on the student to act with humility and honesty, and to inform the physician about his or her lack of training. Personal identification is an obvious solution to such a problem.

4.5 Justice

Aristotle described justice as "giving to each that which it is due." In the context of global health, justice is ambiguous. It is unfortunate that in some countries, one's life might be considered far more valuable than another's, apportioning some with more medical care than others[10]. Similarly, local physicians might contemplate using a clinic's

limited resources to train foreign students over community health volunteers. To circumvent this issue, students and volunteer agencies must evaluate whether a clinic is appropriately staffed and adequately funded to host untrained volunteers. If students are placed in a clinic that has poor capital, they should refrain from using resources for the benefit of their learning[13]. Apart from the monetary benefits by the sponsoring volunteer organization, the ultimate question of whether it is beneficial to host untrained nonmedical volunteers in a clinic or whether there is a better way to allocate these students to benefit a community largely remains unanswered.

5.0 RESPONSIBILITIES FOR PRE-MEDICAL STUDENTS

Training short-term volunteers with the limited resources of a clinic is inappropriate. For students with no certifications, observership over training is a great opportunity to learn. For settings with the wherewithal, it might be appropriate for clinicians to train students. However, it is important for organizations to define what is considered a trainable skill. Clinicians in different countries may have different perceptions as to what trainable skills entail[14]. For instance, some clinicians might argue suturing as an appropriate and trainable skill to volunteers whereas other clinicians might disagree. I believe that trainable skills are competencies that do not require a scientific foundation in medicine, prior clinical skills, or skills that do not leave the patients susceptible to more problems. For example, blood pressure, height, weight, vaccinations could be considered as "trainable" skills. Suturing is not a trainable skill as it requires knowledge of aseptic techniques and wound management. If done inappropriately, it could lead to sepsis and possible death. Further research, in collaboration with healthcare professionals nationally and internationally, is needed to establish guidelines as what skills are considered trainable for pre-medical students in global settings. Furthermore, in resource-poor clinics, training community health volunteers with these skills is a sustainable way to improve health than using the same resources to train transient pre-med volunteers. These responsibilities, although trivial, would relieve some of the responsibilities of the nurses, augment the cohesiveness of a community, and expedite the process of pre-examination.

6.0 SUGGESTIONS

It is important to acknowledge that medical education exposes patients to students and physicians of varying skills and experiences. Differences in types of certifications among pre-medical students could lend to unnecessary confusions. To address this issue, a responsibility checklist detailing the types of responsibilities that correspond to a student's level of training must be created. The responsibilities should be listed on a volunteer's personal identification, providing clinicians with a clearer idea of the volunteers' responsibilities. Moreover, it is critical for institutions and volunteer agencies to evaluate a students' intellectual and emotional maturity before permitting them to engage in global health experiences. As a volunteer, I have noticed some students behave in a culturally insensitive manner, engage in tourist excursions, and act unprofessionally. These behaviors undermined students' efforts and their sincerity. Selecting competent pre-medical students to engage in global health experiences is a possible solution.

Global health experiences in clinic settings thrust pre-medical students into professional roles even before they enter the profession. Because the actions of pre-medical students dictate the safety of patients, pre-medical students should be held to the same standards of professionalism as medical students and physicians. In part, this requires a coordinated effort between volunteer organizations, the sponsoring institution, and the volunteers. As a volunteer, I was assigned to a hospital without the volunteer agency explaining my roles and duties. The student organization that arranged my trip did not adequately inform me of the vast range of ethical dilemmas that I would face. To address these issues, student organizations should hold orientation sessions to provide students with resources, to encourage discussions about ethical and professional standards of medicine, and to introduce possible ethical scenarios they might encounter while abroad. Once in the host country, volunteer organizations should provide students with guidance as to their responsibilities and their safety. Designing a pre-departure curriculum that better prepares students to handle global health experiences could mitigate some of the aforementioned issues. Moreover, because untrained pre-medical students may not be of much help in resource-poor clinics, it might be better for volunteer agencies to allocate these students into activities that better serve the needs of a community. For instance, volunteers, in collaboration with the clinic's staff, could assist in educating a community on preventable illnesses or working with other organizations in creating initiatives addressing issues that plague the developing world.

In the end, we, pre-medical students need to understand that we are engaging in global health experiences to reach-out to a community, and not to boost our resumes. They are not designed for us to obtain clinical experiences that would not be allowed in the US, and the ultimate responsibility lies on us to act with honesty, humility, nonmaleficence, and sincerity. We need to understand that the people we "treat" in these countries belong to someone, and they deserve the best possible care from a trained health-care professional. We are not the best possible care. Not yet.

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