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# The medical student global health experience: professionalism and ethical implications

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## ABSTRACT

Medical student and resident participation in global health experiences (GHEs) has significantly increased over the last decade. In response to growing student interest and the proven impact of such experiences on the education and career decisions of resident physicians, many medical schools have begun to establish programmes dedicated to global health education. For the innumerable benefits of GHEs, it is important to note that medical students have the potential to do more harm than good in these settings when they exceed their actual capabilities as physicians-in-training. While medical training programmes are beginning to provide students with the knowledge to put their GHEs in context, they must remember that they also bear the responsibility of training their students in a framework to approach these experiences in a principled and professional way. It is necessary that these institutions provide adequate and formalised preparation for both clinical *and* ethical challenges of working in resource-poor settings. This paper outlines potential benefits and risks of GHEs and delineates recommendations to some of the current issues.

In recent years, Americans have been jolted into awareness of global issues. Every day, the media highlights images of war in Iraq, dialogues on AIDS in Africa, and accounts of natural disasters worldwide. Over the last decade, infectious diseases such as SARS and the avian influenza have created concern for health and safety globally. These stories reinforce the fact that conditions existing in other places are not as far away as they once seemed.

The field of medicine has appropriately responded with increased funding and support to healthcare students and professionals pursuing global health experiences (GHEs) addressing health disparities. Although research, teaching, and related activities are also GHEs, in this paper, we define GHEs in a clinical context. As national leaders of the Global Health Action Committee of the American Medical Student Association, we often advocate for GHEs and applaud increased support for medical students participating in them. In facilitating GHEs, however, we believe that medical institutions should consider implementing curricular material to better prepare their students for the unique challenges of practicing medicine in resource-poor settings. Medical schools bear the responsibility of fostering principled and professional frameworks for students to approach medicine, and it seems natural that this preparation ought to extend to patients served in any context, including those populations in resource-poor settings.

## CURRENT STATE OF THE GLOBAL HEALTH EXPERIENCE

Increased understanding of the realities of global health has translated to rising student interest in participation in GHEs. A 2004 survey by the Association of American Medical Colleges (AAMC) reported that 22.3% of graduating American and Canadian medical students had participated in a GHE, an 11.5% increase from 2001.<sup>1</sup> AAMC survey data has shown that over the past 20 years, there has been an overall increase in this number, from less than 10% of medical students participating in GHEs as recently as 1995.<sup>1</sup>

Studies examining the benefits of these experiences for physicians-in-training have shown an increase in cultural sensitivity, enhanced community, social, and public health awareness, improved clinical and communication skills, and a greater understanding of the challenges of working in resource-poor areas.<sup>2</sup> These studies have also demonstrated that resident physicians with GHEs are more likely to care for public assistance patients and immigrants, and are more likely to switch from subspecialty medicine to general medicine.<sup>3</sup> Thus, increased awareness of global health disparities and of the educational benefits of GHEs has led to increasing demands for formal medical education specific to resource-poor settings.<sup>4</sup>

A growing number of medical schools have begun to recognise that disparities in access to care result from a broad range of political, social, economic, and cultural issues. As a result, many have begun dedicating elective courses, academic tracks, entire academic departments, and even residency programmes to the study of global health and the alleviation of existing disparities.<sup>5-7</sup> Even so, there appears to be an inadequate amount of formalised global health preparation in medical education. This is of particular concern considering that a large number of medical students have GHEs as early as the summer between their first and second year of medical school. Without improved structure, there is a danger that some medical students may only recognise the range of factors affecting health after they have already arrived in country, or may never attain this realisation.

## ETHICAL CONSIDERATIONS

Our work with the American Medical Student Association, and our personal GHEs have brought us in close contact with a substantial number of medical students committed to alleviating global health disparities. The opportunity to serve an underserved population is an important factor motivating GHE participation for many of our peers.<sup>3</sup> This ability to serve, however, is often

tempered by the limitations in our clinical knowledge, given our status as physicians-in-training. This desire to help, combined with relative inexperience, can pose ethical conflicts and leave both patients and students vulnerable to negative outcomes, as the following account from a first year medical student demonstrates:

After finishing my first year of medical school, I participated in a mission trip to Mexico. Before flying to Mexico, I was not given any cultural, medical, or other training, nor could I speak Spanish. Upon arriving, I was assigned to a clinic where there were hundreds of patients but only one physician.

I remember vividly seeing a frail 11-year-old boy with polyuria, polydipsia and nocturia. My lack of medical training limited my differential. With only a scattered history and no other tests, I told him to limit caffeine intake and see if that helps. Thinking back, he could have had a urinary tract infection, any number of renal abnormalities, or worse, I sent him out without ruling out diabetic ketoacidosis.

And while I was seeing patients by myself, other first year medical students were performing surgeries in the other clinics and later bragging about it. (Anonymous student, personal communication, 2 January 2006)

By no means does this experience occur in every programme or with every student. Students who approach these experiences with harmful intentions are fortunately the exception; however our experience with hundreds of well-intentioned medical students through our own travels, education, and leadership roles with medical student associations has shown us the omnipresent ethical dilemma of practicing beyond one's abilities. This vignette highlights a common perception that people who live in poverty will benefit from *any* medical services, irrespective of the experience, or lack thereof, of the provider. As discussions regarding medical student-run clinics for indigent populations in the United States have demonstrated, this is not always true.<sup>8</sup> These clinics have been shown to benefit patients and medical students alike, much as GHEs do. Buchanan and Witlen discuss the potential of these clinical interactions to teach medical students the ethical principles of *altruism* ("meet society's expectation of them in the practice of medicine")<sup>9</sup> and *duty* ("demonstrating a commitment to care for the poor and to advocate for healthcare access for the underserved"),<sup>8</sup> as established by the AAMC's Medical School Objectives Project in 1998. Teaching of these principles, however, is dependent upon adequate protection of the vulnerabilities of both groups. Indigent patients are a vulnerable population in that they often do not have alternative sources of healthcare. Unlike those who can afford to pay for healthcare, underserved populations often resort to accepting the care provided, even if it may be inadequate.<sup>8</sup>

Likewise, medical students should seek adequate supervision in providing clinical care, as they are legally bound to always practice under the supervision of a licensed physician.<sup>10</sup> Medical students, like all health professionals, have a primary moral and professional obligation to those for whom they care, regardless of setting. This "duty of care", as described by Myers, depends upon the trust that underlies the doctor-patient relationship. Trust, in this case, involves the patient's ability to rely on the clinician as a skilled professional who will help the patient make informed choices in the patient's best interest.<sup>11</sup> Medical students thus have an obligation to disclose their level of training and to not act beyond their capabilities to maintain this trust. Furthermore, one should consider that care offered in these clinics, even if conducted without the supervision of a

licensed physician, could discourage patients from seeking care in better established health centres.<sup>8</sup>

The argument can be made that given the shortage of health professionals in places such as sub-Saharan Africa, which bears 24% of the global disease burden but only 3% of the healthcare workforce worldwide,<sup>12</sup> providing direct service in any capacity may be a better alternative to providing no services. Through our own GHEs early in our training, we know that it difficult for first and second year medical students to assess our own limitations and knowledge. The structure of American medical schools is such that generally medical students must attain a certain level of knowledge prior to having clinical responsibilities. Circumventing this path in resource-poor settings creates a double standard of ethical and professional conduct.

A parallel could be drawn to current practices in international clinical research involving partnerships between researchers from developing and developed countries. In 1997, this debate of ethical standards garnered significant attention following a controversial clinical trial conducted in many developing countries to study the use of a short course of zidovudine for prevention of mother-to-child transmission of HIV. The investigators utilised a placebo-controlled research design, despite the existence of a proven and accessible standard of care. Subsequent discussions centred on the appropriate measure of control in the developing world, where regimens that are standard of care in the developed world simply do not exist for reasons of cost and/or infrastructure. Among others, Angell, Lurie and Wolfe, and the Nuffield Council on Bioethics argued that patients involved in US-sponsored trials should have access to the standard of care as would be provided to participants in the US.<sup>13-15</sup> This view was in line with the principles of the Declaration of Helsinki, which states that participants should "be assured of the best proven and diagnostic method".<sup>16</sup> The Council for International Organisations of Medical Sciences Guidelines, which were created to apply the Declaration of Helsinki principles to the developing world setting, state, "The ethical standards applied should be no less exacting than they would be in a case of research carried out in that [the sponsor's] country".<sup>17</sup> More fundamentally, Angell stated, "Human subjects in any part of the world should be protected by an irreducible set of ethical standards".<sup>18</sup>

While there are well-established ethical guidelines for international clinical research, similar ethical standards for GHEs do not exist. Health system infrastructure and technological advances differ from one healthcare setting to the next, but it is possible for the ethical standards of GHEs to be more consistent. As we move towards a single international standard of ethical research, we encourage the equivalent criteria in the ethics of GHEs.

Conduct on GHEs can be placed in the context of US standards for medical professionalism by referring to the guidelines put forth by the AAMC. The AAMC defines the four key attributes of professionalism as:

- ▶ Adhering to high ethical and moral standards
- ▶ Responding to societal needs and reflect a social contract with the communities served
- ▶ Subordinating one's self-interest to the interest of others
- ▶ Evincing [sic] core humanistic values<sup>19</sup>

GHEs such as the one mentioned in the vignette demonstrate that many students need professionalism reminders and/or guidelines as they embark on GHEs. We recognise that students may be able to participate in more surgeries and procedures in

the underserved communities for many reasons. Increased participation in operations is not problematic on its own; the concern is with students partaking in procedures without sufficient supervision. Often, they may justify the breach of professional standards to themselves by prioritising the educational value, which occurs in the US, but to a lesser degree. Yet, it is worth considering the reasons why underserved populations serve as educational tools.<sup>20</sup> We should bear in mind that patients are likely unaware of a student's educational status and/or are unable to demand better care because of socio-economic or cultural vulnerability. Thus, any medical liberties taken by students may violate the principles of professionalism as noted above, namely, "subordinating one's self-interest to the interest of others".<sup>19</sup>

## RECOMMENDATIONS

The teaching of professional conduct and sound ethical frameworks is in large part accepted as the responsibility of medical institutions, as evidenced by an AAMC study that showed that 89.7% of the 116 medical schools surveyed offered some formal instruction related to professionalism.<sup>19</sup> There is currently no standardised approach for teaching of professionalism in medical schools. There is, however, individualised professionalism training within the medical schools and a renewed push for professionalism research. The American Medical Association is working in conjunction with 27 medical schools on the Innovative Strategies for Teaching and Evaluating Professionalism (ISTEP) programme in order to foster the design of innovative methods to teach, monitor, and evaluate professionalism competencies. Examples of proposals include keeping log books, small group discussions, video series of vignettes, self-reflection papers, and other creative ideas.<sup>21</sup> As these curricula are developed, it is feasible to incorporate education on global health ethics.

The course would not only emphasise the ethics of working with vulnerable populations, but also incorporate preparation for the health and personal safety challenges of working in these environments. Similar to the STEP Programme, pilot global health ethics courses should be designed, fostered, and supported.

The potential merits of a formalised global health professionalism curriculum are very clear. As an ever increasing number of physicians will work abroad, the curriculum would help ensure that every future physician is trained to "understand the extent and causes of ill health among the billions living in poverty in developing countries and the ways to prevent it," thereby allowing them to potentiate their ability to improve the lives of their patients.<sup>22</sup>

Global health ethics courses will help significantly in the maximisation of benefits for patients and students involved in these experiences. Patients, regardless of their finances, ethnicity, gender, or status, have the right to know if their medical provider is a medical student. They should always have the choice whether or not to receive care from a student physician. As a recent British Medical Journal editorial notes, "When in countries where healthcare provision is extremely scarce, students must recognise that there may be pressures to exceed their role. They must not diagnose illness, prescribe, or administer treatment without strict clinical supervision—however "unprofessional" this may feel. Students may not appreciate the dangers of treatment, particularly in countries where familiar medical problems are complicated by unfamiliar levels of poverty. In such circumstances, even with the best of

intentions, inadequately supervised students risk doing more harm than good."<sup>23</sup>

Students also bear the responsibility of saying "no" and recognising their own limitations. They must understand that misconduct and/or maltreatment of any patient, regardless of status, is of consequence. Recognising that medical students are often ill-prepared to understand the complications which may arise as a result of practicing medicine with limited medical knowledge, medical schools should find a way to incorporate the ethical and medical consequences of practicing medicine beyond one's capabilities into the medical curriculum. They have an obligation to teach medical students how to recognise when "to say no", as this editorial suggests.

## CONCLUSIONS

The recommendation of a global health ethics course is not a comprehensive solution. Therefore we are calling for more research on ethics education. Students with limited clinical experience can be taught that there are many ways for them to contribute to the health of their patient populations beyond the direct practice of medicine, including research, cultural studies, distribution of educational materials, and advocacy.

Currently, there are many organisations working to develop a model global health curriculum that can be applied at medical schools, including the American Medical Student Association, the International Federation of Medical Students' Associations, and the Global Health Education Consortium.<sup>24</sup> We encourage these efforts, recognising the enormous difference that increased understanding of global health disparities will make in the treatment of millions of patients. However, as we consider the experiences of many medical students engaging in GHEs, our recommendation is that any such curriculum consistently emphasises measurable, practical, ethical, and professional ways of serving the underserved. With all of the excitement surrounding the development of new opportunities for students to be able to participate in international experiences, our ideal is that medical schools assist students in providing ethical and professional guidelines for global health experiences.

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