

The Value of Global Health Experiences Abroad in Developing Cultural Sensitivity in Undergraduate Medical Education

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Abstract

Medical students, residents, and physicians are encouraged and often required to continue their medical education to possess up-to-date skills and knowledge to best serve their patients. Changes in medicine are not limited to guidelines and therapeutics but also patient populations, leading to an ever-increasing need for improved cultural competency. Clinical experiences abroad are valuable in prompting reflection and discussion regarding cultural values, patient perspectives on traditional medicine, available resources on a global scale, and international community education. A key factor in establishing a successful global health experience is student orientation with regard to expectations, cultural appropriateness, and overcoming language barriers while working with local staff to establish trust and participation. Through descriptive summaries and case studies of three global health experiences from undergraduate medical students to Nepal, China, and the Philippines, this study highlights not only the importance of developing cultural awareness, but also encourages the support of international health student organizations and elective rotations to further professional development and osteopathic practices in global medicine.

Keywords: Cultural sensitivity; Medical service trips; Cultural competency; Undergraduate medical education; Medical mission

Introduction

Global health describes the area of study, research, and practice of achieving health care and equity for populations across the world [1]. With mass aviation gaining steam in the 1950s, short term medical service trips (MST) became common as high-income countries delivered interventional-style care to low income countries with high disease burden and physician shortages [2]. In addition to MSTs, other experiences such as global elective rotations and self-directed cultural immersion

trips have provided a window into how healthcare is practiced around the world for healthcare providers and professionals in training [3-5]. Undergraduate medical students often desire opportunities to participate in global health experiences for personal interest, professional development, or other associated reasons, but are stymied due to barriers such as differences in culture, language, and medical skill level [6,7]. In such situations, there is concern that undergraduate medical students can cause harm or are unable to administer the level of care needed [8].

Global health research has primarily been focused on the promotion of different healthcare models in target populations as well as empiric evidence of benefits to said populations [9]. Due to the largely unregulated and disparate nature of healthcare across the world, the creation of guidelines for standards of care and navigation of foreign bureaucracies and administrations have predominated early global health literature [10]. Over the past decade, opinion pieces and reflections have further called to question the value of global health experiences relative to long-term sustainability and addressing socioeconomic determinants of health [11]. Limited research, however, exists on the effect of such experiences as a primary or adjunctive tool in developing cultural competence in undergraduate medical education [12]. Here we present three global health experiences from medical students to Nepal, China, and the Philippines that emphasize the importance and value of global health experiences in developing cultural awareness, professional development, and osteopathic recognition.

Case Presentations

Nepal

Undergraduate medical students of Touro College of Osteopathic Medicine's International Medicine/DOCARE International Student Organization partook on a two-week MST to Kathmandu, Pokhara, Chitwan in Nepal as shown in **Figure 1**. Partnering with International Volunteer HQ (IVHQ), a New

Zealand-based volunteer travel company, students were greeted at the airport by a member of the local team and transported to the volunteer accommodation in Kathmandu. Accommodations, local travel, and food were covered by the program fee, and the orientation included topics such as introduction to Nepal, Nepalese customs, language training, rules and expectations, safety and additional travel concerns, as well as a review of the specific project and placement. The orientation also offered a cultural immersion with visits to local temples, food tours, and other social events to interact with fellow attendees and the larger Nepalese communities.



Figure 1: Map of Nepal with MST locations marked in red.

On this trip, various local schools and community health centers paired up with the undergraduate medical students to develop health fair-style events. Through IVHQ, prior informal needs assessment inquiries revealed various health concerns, with musculoskeletal pain, dental caries, and metabolic syndromes being the top three most queried topics. With proper oversight and supervision, baseline primary care assessments through patient history taking and physical examinations were performed, with appropriate counseling and education given based on local medical infrastructure and resources. Osteopathic manipulative medicine education and treatment were also offered in relation to musculoskeletal, gastrointestinal, and neuropathic disorders. Health fair participants were also instructed on osteopathic home exercises to supplement the osteopathic treatment given.

China

Undergraduate medical students partook in a two-month self-guided MST/immersion trip to Shenzhen in the Guangdong province of China, staying in the districts of Bao'an, Luohu, and Futian as shown in **Figure 2**. Due to the lack of an overarching organization, students were required to handle the logistics of accommodation, transportation, and scheduling. Contacting and partnering directly with local providers, students participated in immediate cultural immersion, requiring high levels of adaptability and resourcefulness upon arrival. A high level of cultural and language fluency were *de facto* prerequisites as these were self-organized trips.



Figure 2: Map of China, with Guangdong province highlighted and Shenzhen districts in inset.

On this trip, students followed a traditional Chinese medicine (TCM) and acupuncture clinic to observe the intersection between Eastern and Western medicine. Primary focus was on treatments in women's wellness, reproductive health, musculoskeletal disorders and acute inflammation. With a more holistic approach to health through the integration of herbal remedies and body meridians rather than imaging and single molecule pharmaceuticals, medical students were challenged to think beyond Western standards of healthcare. Parallels between TCM and osteopathic medicine philosophy and treatment were also emphasized as a way of building connections between two seemingly disparate subjects. Depending on patient rapport, students were invited to follow patients for the day from clinic to witness how their daily habits and surroundings could affect their health. Informal reflections and discussions of the experiences were conducted to confront and process their own biases of TCM relative to Western ideas and perspectives of complementary medicine.

Philippines

Fourth-year undergraduate medical students were given the opportunity to spend a 1-month infectious disease rotation in Manila, Philippines at the San Lazaro Hospital—a referral facility for Infectious and Communicable Diseases of the Philippines

Department of Health as shown in **Figure 3**. Subsidized by the Filipino national government, the 500-bed capacity hospital provided free healthcare services to meet the needs of the underserved in hopes of decreasing the burden of chronic infectious disease. Students attended lectures on infectious diseases that were endemic to the area and applied this knowledge through inpatient and emergency room care of patients with tuberculosis, dengue fever, and human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS).



Figure 3: Map of Philippines, with Manila shown in red.

Infectious diseases such as diphtheria, tetanus, and rabies were commonly seen in outpatient clinics, highlighting disparities in health literacy and resources to combat what is considered preventative care in other countries. Late or end stage physical presentations underscored the need for better outreach, with patients having opisthotonos and risus sardonicus from untreated tetanus or *Pneumocystis jirovecii* pneumonia from unmanaged AIDS. Undergraduate medical students participated in grand rounds and daily didactics that included elements that discussed the social determinants of health and specific measures for decreasing morbidity and mortality in the local community. The roles of culture, religion, and the family structure were discussed and observed as adjunctive factors that had the possibility of influencing patient care and follow-up.

Discussion

Integral to global health experiences, cultural exposure and immersion challenge participants to integrate their clinical knowledge with the reality of healthcare in the selected country/location. The United States Accreditation Council for Graduate Medical Education (ACGME) has emphasized cultural competency as a crucial component in its six core competencies assessed prior to completion of residency [13]. Multiple studies have shown how global experiences, such as MSTs, can help develop humanism and professionalism in working with diverse populations, giving greater insight into the social and cultural determinants of medicine as well as understand the influence that global health disparities can have on new immigrants coming into the American healthcare system [1,5,14]. Limited research has been done on the effects and benefits of global

health experiences in undergraduate medical education despite similar requirements delineated in both allopathic and osteopathic accreditation bodies for graduation [15]. Fulfillment of these requirements vary from school to school and can take the form of formal classes and lectures in the curriculum to sponsored MSTs and community outreach events [14,16,17]. Standardization and analysis for best methods has been minimal, thus furthering the argument that greater research is needed to push for greater funding and opportunities [18]. As seen in the Nepal trip, undergraduate medical students gain a deeper understanding and appreciation of the Nepalese culture in the context of health, which can then be applied to future transcultural experiences of patient care. Global health experiences allow for undergraduate medical students to compare the theoretical frameworks seen in textbooks and simulations to the firsthand experience of organic patient interaction [19,20].

Osteopathic medical education considerations

Unique to the global experiences presented, each were completed in conjunction with an osteopathic undergraduate medical school or involved osteopathic medical students and faculty. Started in the late 19th century by an American physician, osteopathic medicine (OM) practice is rooted in a holistic, interconnected, whole-body approach to medicine [21,22]. International recognition of the osteopathic profession and its treatment modalities, however, has been limited despite having near identical training between allopathic and osteopathic undergraduate and graduate medical education [23]. As such, global health experiences such as the Nepal and China trips, allow for international communities to become acclimated to osteopathic physicians and care, thus eliminating any bias or misconception if they were to come in contact with one. Through this interaction, positive experiences with local providers can also assist in lobbying and recognition efforts to governments and administrations to extend practice rights, which can assist in physician shortages [24]. For undergraduate osteopathic medical students, global health experiences bridge the theoretical knowledge with tangible experiences that highlight how osteopathic manipulative medicine can contribute to diagnosis and treatment when conventional medical standards are unavailable [1,25,26]. Furthermore, as seen with the China trip, MSTs help to develop the ability to identify complementary medicine practices, draw connections to osteopathic medicine, and advocate/dissuade for its use when appropriate.

Limitations and challenges

As seen in the cases presented, global health experiences are not without limitations and challenges. Since its inception, institutional based experiences have utilized a paternalistic model of providing healthcare to “third-world” countries, often with little attention paid toward indigenous practices or procedures [27]. Compared to the needs assessment done in Nepal and the Philippines trips, early examples have focused on areas that providers perceived as important and valuable, rather than what the community needed [28]. As global health has

evolved, the concept of “voluntourism” has emerged, with for-profit companies capitalizing on creating experiences that show minimal respect or reverence to the location or local people [29,30]. With short term MSTs specifically, a common criticism is the inability to address the social determinants of health, as once providers leave, the viability of continuing programs and treatments become juxtaposed against the sparse resources and infrastructure. Reflections on the ethical obligations of non-maleficence and justice have also questioned the appropriateness of using undergraduate medical students on self-directed trip without adequate supervision [8]. Nevertheless, the utility of global health experiences in undergraduate medical education is a new field that will require greater studies in the future, especially in an ever-global patient population.

Conclusion

Lack of exposure to different global cultures is a challenge often posed to undergraduate medical students. Through global health experiences, students are able to gain a first-hand appreciation for the need for appropriate cultural sensitivity. It is important for future physicians to strengthen cultural competency during their undergraduate medical career to help develop skills in counseling for health promotion, disease prevention, public health systems, and global health. Osteopathic demonstrations and treatment performed abroad can help spread awareness of osteopathic medicine. In addition, students should be mindful of any traditional medicine that patients may be receiving, particularly, any contradictory or supportive effects that traditional modalities may have with Western medicine.

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