

Teaching Cultural Competency through Global Health Education at Weill Cornell Medicine

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Abstract

Background: Educating medical students to better understand the complexities of cultural competence, the social determinants and environmental determinants of health that are important and integral components of the medical school curriculum. **Methods:** In 2014, Weill Cornell Medicine (WCM) implemented a new curriculum, the adoption of which provided the means to enhance an existing global health program, informally introduced in 2009, and to address the issues of cultural competency. In this article, we share WCM's experience in building and expanding its global health curriculum. **Results:** A hallmark of our program is the successful collaboration between students and faculty to create a multi-disciplinary global health program that incorporates electives, clinical field placement, and collaborative research. **Conclusion:** Key lessons learned through our experience include the necessity for strong faculty-student collaboration, full support from the administration, and building global partnerships. Our example could be a useful guide for other medical schools seeking to establish a global health education curriculum.

Key Words: Global health; Cultural competency (Source: MeSH-NLM).

Introduction

The Liaison Committee on Medical Education lists 'Cultural Competency and Health Care Disparities' as an important element in its 12 accreditation standards. Section 7.6 clearly states that the medical school curriculum should include "...opportunities for medical students to learn to recognize and appropriately address gender and cultural biases in themselves, in others, and in the health care delivery process."¹ Educating medical students to better understand the complexities of cultural competence and the social and environmental determinants of health are viewed as integral components in the medical school curriculum.²⁻³ Focusing on global health is also viewed as a means of addressing diversity and cultural competency.⁴⁻⁷ Within the past decade, many medical schools have introduced a global health component into their curricula, although the structure of which varies widely in scope and content. The most prevalent example of a global health program is offering an international elective experience. Between 1998 and 2008, medical schools in the United States and Canada experienced a 270% increase in the number of students participating in an international experience.⁸ As of 2013, the latest year for which we found available data, at least two-thirds of medical schools offered global health opportunities.⁹ However, little standardization across programs existed in terms of requirements for didactic, clinical, scholarly, and cultural components.¹⁰

There is no "right way" to present global health, and the scope and content of global health curricula vary among medical schools. Some schools have the capacity to organize and administer their own global health program, while others may have to rely on outside entities to do so. For example, the American Association of Medical Colleges (AAMC) Visiting Student Learning Opportunities (VSLO) program merged two existing visiting student programs: the Visiting Student Application Service (VSAS®) and the Global Health Learning Opportunities (GHLO®). The VSLO program provides assistance to institutions located in the U.S.

that either send their students to other U.S. medical schools or receive students from other U.S. medical schools. The Global Network component of the VSLO program assists institutions located in the U.S. and overseas to enable students to participate in an international elective at a host institution.¹¹

In this article, we describe WCM's innovative and integrated approach to offering global health teaching in the medical school curriculum. A hallmark of our program is the successful collaboration between students and faculty who work together to create a multi-disciplinary global health program focused on education, clinical field placement, and collaborative research. Throughout all aspects of the program, cultural competency is an essential and valued component.

Methods

About the Weill Cornell Medicine Global Health Program

Global health opportunities, including applied experiences and research abroad, have been available to Weill Cornell Medicine (WCM) students since the 1970s. Over time, the scope and focus of the program greatly expanded from initial research and training sites in Haiti and Brazil, to partnerships with medical schools and hospitals across six continents. In 2004, the Office of Global Health Education (OGHE) was established by the Office of the Dean of the medical school to coordinate global health educational activities. The intent was to expand and enrich international opportunities available to WCM students and to foster partnerships with leading medical schools around the world. This engagement has led to collaborative research and bilateral educational opportunities. A previous article describes this early development of WCM's global health program.¹²

Despite the growth of the applied experience component of the global health program at WCM, there was no formalized curriculum for students to learn about global health. In 2009, a small group of WCM faculty members, the Global Health Teaching Associate, an

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administrative assistant to the global health program, and medical students developed the Global Health Curriculum (GHC), which initially consisted of an informal collection of a global health activities, including applied experiences abroad and seminars. In order to create a formal global health course, we relied on the set of core competencies published by the Consortium of Universities for Global Health.¹³ An interdisciplinary curriculum for the formal global health course addressed five core competencies:

1. Global Burden of Disease
2. Health, Equity and Social Justice
3. Globalization of Health and Healthcare
4. Capacity Strengthening of Global Public Health Programs
5. Comparative Health Systems and Health Care Delivery

This initiative would not have succeeded without the full support and collaboration of faculty, students, and the administration.

Results

Evolution and Change of the Global Health Curriculum

In 2014, WCM, along with many other medical schools, adopted a revised medical school curriculum. At this time, almost all (98%) of U.S. medical schools enacted curricula changes that “enhanced integration of basic science content (e.g., an organ-system/case-based curriculum)” and 95% of U.S. medical schools made changes that “enhanced clinical correlations in the preclinical years.”¹⁴ At WCM, the new curriculum, among other things, increased emphasis on early clinical exposure during the first year, which allowed students to interact with patients beginning in the first semester of medical school. Issues relating to health care diversity are included in all modules. Curriculum revision also enabled the integration of global health into the four-year curriculum through the newly created Areas of Concentration (AOC) curriculum course that also spans the four years of medical school.

The AOC course mandates that students declare a research focus, and after the completion of the core clinical clerkships, conduct a dedicated six-month scholarly research project under the mentorship of a WCM faculty member. Global Health was approved as an AOC option for students. As such, it became imperative that the nascent GHC expand to meet the qualifications of the AOC program. What emerged was a robust multi-focused program that enabled global health to be incorporated into the medical school curriculum in a comprehensive way.

Global Health Electives and Research Opportunities

The global health program includes electives, seminars, and opportunities abroad that span the four years of medical school.

Courses and Electives: *Introduction to Global Health*, an elective offered in the second semester of the first year, focuses on a range of global health topics, including the global burden of disease, comparative health systems, infectious disease, and non-communicable diseases in low- and middle-income countries. *Foundations in Global Service*, an elective offered in the second semester of the first year, focuses on preparing students to conduct global health field work. This elective enables students to explore practical and ethical considerations before taking electives abroad. The *Global Health Preceptorship* is offered as an option in the required clinical preceptorship program during the first and second semesters of the first year.¹⁵ The global health clinical preceptorship was established to enable first-year students to participate in healthcare delivery to marginalized, resource-limited populations in New York City. Students are assigned to a clinic or physician’s office located in under-served area of the city, and spend one afternoon each week shadowing physicians over a five-week period. Students also complete weekly readings to learn about the clinical and social approaches to working with vulnerable populations in New York City. These topics include, the social determinants of health, immigrant health, language discordance, and healthcare as a human right. To complete the course, students attend a critical reflection session which allows students to process and share their experiences with their peers.

Global Health Lecture and Seminar Series: *Global Health Grand Rounds* are scheduled several times during the academic year. Renowned global health leaders from around the world are invited to speak on timely global health topics. *Global Health Career Seminars*, scheduled monthly throughout the academic year, offer students the opportunity to have conversations with WCM clinical and research faculty who are engaged in global health work. These small group sessions (~25 students) provide a more informal way for students to appreciate how global health can be incorporated into clinical medicine.

Applied Global Health Experiences: During the summer between the first and second years, WCM students can take an 8-week *first-year international summer elective* under the supervision of a host mentor. Projects typically focus on population/community health research, as students do not have sufficient clinical skills at this point of time in their medical school training. Students participate in an ongoing research project under the mentorship of the host researcher. Of the approximately 100 students in each class, about 7-12 students take advantage of this opportunity, for which work-study funding is available (~\$3,000). During their final year of study, students are offered another opportunity to complete an applied global health experience, known as the *fourth-year international elective*. Approximately 35-40 percent of the fourth-year students take an international clinical elective, which ranges from four-to-eight weeks in length. The Office of Global Health Education (OGHE) oversees these international clinical electives (see www.med.cornell.edu/international). Some programs focus solely on clinical care while others combine clinical care with learning more about the healthcare system of the host country.

Students receive a travel stipend (\$3,000) from which airfare, accommodations, and living expenses can be paid for. The stipend, allocated by OGHE to all students who take a clinical elective abroad, is funded by gifts, donations, and endowments made to OGHE by donors. A small percentage of students (1-3%) take a *research year* off between the 3rd and 4th year to do global health research at a host institution. A small stipend (~\$1,500) is also provided to help defray the cost of living. Many students also receive research grants (i.e., NIH, Foundation funding) to help defray the costs of conducting research abroad.

AOC Research: An important component of the AOC course is the *Scholarly Project* (SP). In second year, every student identifies an area of clinical research interest and prepares a research proposal that forms the basis of their SP. A WCM faculty member serves as the primary mentor who oversees the student’s research, and the final, journal-style written report is reviewed and approved by two independent AOC faculty members. The project must be original research that is part of an existing grant-funded project or conceived by the student. Built into the curriculum is a dedicated six-month period during the third year in which the student is not taking any clinical rotations or electives. The block of time is specific to conducting research. The research may be conducted at Weill Cornell, at another medical school in the U.S., or abroad. A faculty mentor at Weill Cornell and a research mentor at the host institution are responsible for overseeing the student’s work, and the WCM mentor has the responsibility of approving the finished product. All projects must have Institutional Review Board (IRB) approval from the institution at which the research is being done. Examples of past scholarly projects that focused on some aspect of global health include research in palliative care in India, hypertension in rural Tanzania, and multi-drug resistant TB in Sub-Saharan Africa.

Certificate in Global Health: To earn a Certificate in Global Health, an acknowledgment of active participation in the global health program at Weill Cornell, students must select global health as their primary or secondary AOC for their scholarly project. Additionally, students must be actively engaged in at least one global health program on campus (i.e., Global Health Grand Rounds, Global Health Career Seminars) and take at least one international elective abroad. The Certificates are awarded at a special event prior to graduation. Since the inception of the Certificate, approximately 15-25 students in each graduating class (N=100) have received the Certificate in Global Health. (*Figure 1*).

Figure 1. Requirements to earn a Certificate in Global Health.



* For MD/PhD students there is no AOC selection requirement. Thus in order for MD/PhD student to qualify for the certificate, they must become a member of the Global Health Collective in lieu of selecting Global Health as their primary or secondary AOC.

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Faculty Involvement

All global health programs and initiatives have faculty input. A multi-disciplinary group of faculty throughout WCM, known as the Global Health Faculty Advisory Group, reviews all student applications requesting an international elective. If faculty approval is not given, the student is invited to revise and resubmit their proposal. For example, if the proposal does not clearly state what the student is planning to do during this elective, or if the host mentor is deemed inappropriate, the Advisory Group will request further information and clarification. Students whose proposals are ultimately not approved are ineligible to take part in the international elective and to receive funding. The Global Health Faculty Advisory Group also plans new curricular initiatives, establishes new international and local partnerships, and serves as student mentors. Their role is essential to the continued success of the program.

Student-Led Initiatives

OGHE has carefully fostered a global health community of interested students and faculty members. Student involvement is hugely important to the success of our global health program. The *Global Health Teaching Associate*, a full-time position in OGHE, serves as the bridge between students and faculty. The position is usually filled by a recent college graduate with strong global health experience. This individual also coordinates the global health courses and program activities.

A student group, the *Global Health Collective*, was formalized in 2014 to work collaboratively with the global health faculty in organizing lectures and seminars, as well as to give the students a voice in designing new global health initiatives. One of the main objectives of the Collective is to work with OGHE to foster a sense of community among students and faculty within the global health network at WCM. In an effort to achieve this goal, the Collective, in collaboration with OGHE, organizes various global health career seminars and student panels discussing experiences abroad. The global health career seminars, in particular, are very popular among the students. These informal, small group (N=25) sessions enable interested students to meet with faculty members who are engaged in global health activities

as well as clinical care and to understand better how to integrate clinical medicine and global health into a career.

The Global Health Collective has also developed many student-led initiatives, such as the *Global Health Journal Club*, as a way for students to learn about new research in global health, as well as to have discussions on current global health topics. The Journal Club is now organized as a monthly event in which a Weill Cornell student presents a scientific article and leads a discussion with the student audience on the topic.

The *Infectious Disease (ID) Interest Group* seeks to inform students about careers related to ID, connect them to ID faculty, and link them to research opportunities within the WCM community. The group disseminates information on ID research opportunities, organizes shadowing experiences, and convenes faculty panels so that students can learn about ID-related career opportunities, as well as meet potential mentors. It also organizes events surrounding World AIDS Day and other important global health events to increase student understanding and awareness of specific global health topics.

The *Cornell Water Society* offers students the opportunity to participate in a clean water project (i.e., installation of a solar-powered water pump and filtration system) in rural Shinyanga, Tanzania. This project is the result of an international collaboration of non-governmental organizations (NGOs), local community members, and WCM students. The Weill Cornell Water Society is currently conducting research to assess whether the water pump system has contributed to reduction in the incidence of diarrhea in children under five years of age. In doing so, students gain experience participating in international public health initiatives and research in a meaningful way.

The *Center for Human Rights* is a Weill Cornell Medicine faculty and medical student-run human rights clinic dedicated to providing forensic medical evaluations to individuals seeking asylum in the United States. The clinic is staffed by physician volunteers, and students are afforded first-hand experience in the assessment of human rights violations.

Strengthening Opportunities for Faculty Mentorship

Building a roster of Global Health Faculty mentors was essential to the success of the program. These individuals guide interested students in finding projects and opportunities abroad, and connect them to mentors at the host institutions. OGHE has created a database of over 60 WCM faculty members and researchers who are involved in global health activities in over 28 countries. Additionally, OGHE hosts Social Hours between faculty members and students in order to facilitate networking and share updates on ongoing research projects. Prior to this, navigating the multitude of global health mentorship opportunities was cumbersome. The global health faculty database and Social Hours have improved the process of finding an appropriate global health mentor.

Communicating global health activities, updates, and new initiatives to the WCM community and general public is crucial for the efficient functioning of the program. OGHE's website has been restructured to provide students with current information and insight about various global health opportunities. Included is a robust set of student resources, including a Travel Handbook and a Global Health Student Guidebook that outline our programs and list all WCM faculty who are currently conducting global health research.

Administrative Support and Funding

Support for global health by the WCM Administration has been essential to the strength of our program. WCM leadership has been highly supportive of our initiatives and activities. While global health programs

at other medical schools may receive their primary funding from their school administration, OGHE is self-funded thanks to the large number of endowments provided by generous donors as well as by elective fees charged to visiting international students who take clinical electives at WCM and its affiliated hospitals. We realize that our financial situation may be quite different from other schools and are grateful to our donors for their support of our programs.

Discussion

Next Steps

The WCM global health program continues to be a work in progress—growing substantially over the past decade and continuing to learn how to navigate and overcome challenges that arise. Its integration into the medical school curriculum was a tremendous step in validating the importance of this area of study and its necessary place in the curriculum. After its integration, it was imperative that accessibility be expanded so that any student could participate regardless of financial constraints. Further, didactic coursework and applied experiences were expanded to expose students to an array of issues and topics, which serve to broaden and deepen the traditional medical school curriculum. Given the diverse educational, professional, and cultural backgrounds of students, and their different levels of exposure to global health topics, creating a learning environment that encompasses the global context enables students to develop the skills required of physicians in today's world.

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