

Perspective

Teaching Global Public Health in the Undergraduate Liberal Arts: A Survey of 50 Colleges

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Abstract. Undergraduate public health and global health studies are usually found at universities with graduate programs in the disciplines. Following the experience of teaching a short course in global health within the liberal arts, we reviewed global and public health offerings at 50 liberal arts colleges for the 2009–2010 academic year. Forty-two percent had a track, concentration, or program, and 30% had global or public health student organizations. All colleges listed at least one course in the fields, with the highest number in the social sciences. However, many colleges had not coordinated them into a theme. Values of a liberal arts education are found in the study of global and public health: social responsibility, critical thinking, ethical reasoning, and knowledge of the wider world. We propose identifying these programs within the undergraduate liberal arts as global public health. Capturing interest in global public health will enhance the curriculum and student experience.

In this day and age, when the world is so fluid with regard to news and information, the knowledge that unnecessary deaths are occurring and that health care lags so far behind in some regions cannot be ignored. From the standpoint of basic human rights, suffering and inequity cannot be tolerated.

Williams College student during a global health short course

INTRODUCTION

Student interest and activism is driving the development of global health curricula at the undergraduate and graduate levels. In the words of Dartmouth College President Jim Yong Kim in his 2009 inaugural address, students have seized upon a “passionate commitment to making the world a better place.”¹ As young people see successes in global health initiatives, such as decreases in global polio cases or the increase in mosquito bed net distribution in Africa, the field becomes a natural outlet for such passion. Although the literature debates the definition of global health and its relation to public health,^{2–4} students are not waiting for clarification; in their commitment to global health equity they seek firsthand experience in low-income countries in their desire to make a difference. This passion, however, needs grounding in formal education. President Kim described this as “the practical understanding of complex systems to deliver solutions on a global scale. Passion and practicality.”

Aspects of global health have been taught as part of other disciplines for years, usually within public health and tropical medicine.⁵ However, it is only recently that global health programs have been formally introduced into existing departments or as a separate discipline leading to a degree.^{4,6} In 2008, universities in the United States and Canada came together to form the Consortium of Universities for Global Health with the broad vision of making their universities transforming forces in health by integrating science, education, policy and service.⁷ To date, there are approximately 60 universities that have developed global health programs that are characterized by a combination of institutional commitment to the discipline, education and research programs, and partnerships with universities and sites overseas.

Student interest in global health is likely to be no less passionate in liberal arts colleges: traditionally small residential colleges (offering only selected masters level degrees or no graduate level programs) that focus on a broad educational experience in the sciences, humanities, and the arts, in the context of close student-student and student-faculty interactions. Opportunities to formally study aspects of global health may be limited in these institutions because the field could be considered more of a pre-professional concentration for the study of public health.

However, it is precisely the values of a liberal education that study in global health emphasizes: development of social responsibility, critical thinking, intellectual and practical skills in communication, analysis and problem-solving, ethical reasoning and action, and knowledge of the wider world through experience and integrated study in the arts and sciences. These values are clearly described in the learning outcomes of the decade-old initiative, Liberal Education and America’s Promise (LEAP), of the Association of American Colleges and Universities.⁸

TEACHING GLOBAL HEALTH

As a graduate of a liberal arts college, Williams College, and with an interest in teaching and exploring global health in such institutions, I (DRH) took advantage of the month-long winter study period offered by Williams. During the month of January, students focus in depth on a single theme. In 2009 and 2010, I taught “Global Health—Why We Should Care”, a course that combined the science and story of global health, or as one student remarked, the course illustrated the humanity behind the epidemiology. Although a biomedical approach was taken with a focus on communicable disease, key aspects of the social determinants of health, maternal/child health, humanitarian aid, and global health careers were also explored (Supplementary Table 1).

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For each topic, articles from the scientific literature were assigned as well as stories, often from the lay press, which illustrated the effect of a disease or condition on a person, family, or community. For instance, when discussing maternal/child health, articles were assigned from the Lancet maternal survival series (<http://www.thelancet.com/series/maternal-survival>) with updates from the Countdown to 2015 Initiative (<http://www.countdown2015mnch.org/>), along with: "Death in Birth" from Time Magazine,⁹ and a chapter describing a pregnant woman with malaria from "The Malaria Capers" by Robert Desowitz.¹⁰ Classes began with a didactic presentation, followed by a lively discussion of the scientific and lay literature. There were also case problem-solving exercises, and film documentaries. The diversity of students' interests (or intended majors: e.g., economics, anthropology, biology, psychology, women's studies) led to wide-ranging debate, as well as creative solutions to global health problems.

Students fulfilled course requirements by regular attendance, class participation demonstrating that they had read the assigned material, and writing a paper. The paper could analyze a global health issue, or be a short story that integrated material the student had learned into the life of a fictional character or community. Scientific papers included analyses of the prevention of maternal to child transmission of human immunodeficiency virus, economic initiatives to improve health in a slum of Lagos, Nigeria, management of club foot in low-income countries,¹¹ the influence of the Maoist insurgency on child health indicators in Nepal,¹² and the sex worker Sonagachi Project in India. Creative stories were about rape and human immunodeficiency virus infection in Zimbabwe, the thoughts of a community health worker in Ethiopia as the country transitioned from malaria eradication to smallpox

eradication, and the challenges faced by a young man returning to his home in the Democratic Republic of the Congo.

SURVEY OF GLOBAL HEALTH AND PUBLIC HEALTH TEACHING IN UNDERGRADUATE LIBERAL ARTS

Following this experience of teaching, we were intrigued to determine if global and/or public health was being taught at other similar institutions. Therefore, we explored the teaching of these themes at other liberal arts colleges. Had they been embraced by most colleges or were they still not widely taught?

The fifty top-ranked liberal arts colleges in the United States were identified by their U.S. News World and Report ranking for the fall of 2009 (<http://www.usnews.com/rankings>) (Supplementary Table 2). Each college's 2009–2010 course catalog and college website was interrogated with the search terms "health," "public," or "global" singly or in combination, to identify thematic tracks, concentrations, programs, and courses in which these terms appeared in the title or description. Information on all student organizations was reviewed to identify those that were oriented around global and/or public health, social justice, or service. The findings are shown in Table 1.

Of the fifty colleges, 21 (42%) had an officially recognized curricular track, concentration, or program in global health or public health (Table 1). Colleges that had more expansive offerings in the form of a program, or in the case of the Claremont Colleges, the opportunity for undergraduates to study towards a Masters in Public Health, organized the curriculum as a consortium between colleges in which students

TABLE 1
Curricular offerings in global public health at 50 liberal arts colleges in the United States*

Category	No. (%)	College consortium†	No. courses (n ± SD)‡					Total	Student global or public health organizations, no. (%)	Student service, social justice, or acquired immunodeficiency syndrome organizations, no. (%)§
			Natural sciences	Social sciences	Humanities and the Arts	Interdisciplinary	Other			
Colleges with formal curricular offering in global or public health¶	21/50 (42)	8/21 (38)	5.9 ± 6.4	17.1 ± 14.8	3.0 ± 3.0	1.5 ± 2.4	0.9 ± 2.1	28.4 ± 22.9	6/21 (29)	15/21 (71)
Track	9#	0/9							3/8	5/8
Concentration	5	0/5							1/5	4/5
Program	3#	3/3							2/3	1/3
Early study for MPH**	5	5/5							0/5	5/5
Colleges with no formal curricular offering	29/50 (58)	–	1.2 ± 3.0	4.6 ± 4.9	0.3 ± 0.5	0.4 ± 1.0	0.1 ± 0.6	6.7 ± 6.7	9/29 (31)	18/29 (62)
Total	50		3.2 ± 5.3	9.9 ± 12.0	1.4 ± 2.4	0.8 ± 1.5	0.5 ± 1.5	15.8 ± 19.0	15/50 (30)	33/50 (66)

* The 50 top-ranked liberal arts colleges in the United States as ranked by U.S. News and World Report in 2009. These colleges are listed in Supplementary Table 2.

† Curricular offering is through a consortium of colleges where courses can be taken at multiple institutions.

‡ Courses that had the theme of global health or public health, by course grouping, e.g., natural sciences. When a college had a track, concentration, or program in global or public health, usually all courses within this were listed.

§ When a college did not have a global health or public health organization, did they have service, social justice or human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) organizations? Pre-professional medical dental or nursing organizations were excluded.

¶ A formal curricular offering was as a track (series of courses within a concentration), concentration (a discipline, such as International Studies, where the student puts together multiple courses to fulfill the requirements; often thought of a minor), or program (a multi-institutional curriculum leading to a certificate).

One college, Smith College, had its own track as well as being part of a five college consortium (Amherst, Smith, Mt. Holyoke, Hampshire, and the University of Massachusetts) for a program in Culture, Health, and Science.

** The Claremont colleges in California (Pomona, Claremont McKenna, Harvey Mudd, Scripps and Pitzer) allow third-year undergraduate students to work simultaneously toward completion of their undergraduate degree and a masters in public health (MPH) at Claremont Graduate University School of Community and Global Health.

could take courses at any one of the colleges. Otherwise, the thematic tracks and concentrations were usually offered within a single institution. Each of the tracks, concentrations, and programs were interdisciplinary reflecting the breadth of the topic, and taught by faculty from several departments. Courses taken contributed to fulfilling the requirements of the track, concentration or program, as well as the normal academic requirements. Forty-eight percent of colleges that indicated the year of development of offerings in global or public health, had created them in or after the 2005 academic year, reflecting their recent addition. All of the 29 colleges that did not have institutionally recognized themes offered one or more courses that dealt with the discipline.

The most number of courses were within the Social Sciences (Table 1). Colleges with formally recognized curricula listed more courses than those without formal themes, 28.4 ± 22.9 (mean \pm SD) courses versus 6.7 ± 6.7 . Global or public health student organizations were present at 30% of the colleges, with all but two of the other colleges having service, social justice, or acquired immunodeficiency syndrome organizations. As a reflection of widespread interest, student organizations of all types were equally divided between colleges with and without formal offerings in global or public health.

DISCUSSION

In recent years, there has been much discussion about the value of integrating public health education in the undergraduate setting.¹³⁻¹⁶ In 1987, the President of Swarthmore College suggested the value of teaching epidemiology in the liberal arts,¹⁷ and in 2003 the Institute of Medicine called for public health education for all undergraduates as an essential part of the training of citizens.¹⁸ The U.S. Department of Health and Human Services in their initiative, Healthy People 2020, have also called for increased teaching of public health in the undergraduate curriculum.¹⁹

The process of introducing public health within the liberal education framework has moved forward with the Educated Citizen and Public Health initiative, that has been driven by a collaboration of public health associations, the Association of American Colleges and Universities, and education leaders in public health and the arts and sciences (http://www.aacu.org/public_health/index.cfm).²⁰ This initiative has identified essential learning outcomes that are based on those developed as part of the LEAP vision; it has also recommended offering introductory courses in epidemiology, public health and global health.^{16,21}

The addition of themes encompassing global health is a natural extension of the introduction of public health into the undergraduate curriculum. A working definition of global health includes a commitment to health equity for all persons and populations through the involvement, integration, and application of multiple disciplines within and outside the health sciences.²⁻⁴ It is precisely this need for integration of disciplines that can flourish at liberal arts colleges.^{14,22}

Although there are conceptual differences between global health and public health, it seems artificial to establish a separation between them at the undergraduate level; the ideals of both overlap, as so clearly illustrated by the LEAP vision, the Educated Citizen and Public Health initiative, and the debate in the literature declaring that global

health is public health.^{3,8,20} Also, many of the colleges did not make a clear distinction between these themes. The introduction of the teaching of global and public health seems to be a relatively recent phenomenon with many colleges introducing this since 2005. Thus, it is appropriate to term these undergraduate tracks, concentrations, or programs as those in "global public health." This designation should also prevent unnecessary competition between advocates of each area as colleges endeavor to develop a curriculum in the disciplines with what may be limited resources and academic expertise.

This review of global public health offerings has identified strong interest within liberal arts colleges. Nearly half of the colleges that were reviewed have developed formally recognized tracks, minors, or programs. All colleges offer courses, and student interest in global public health and social justice organizations is present on nearly all campuses. Most courses relating to global or public health were in the social sciences. This finding indicates that liberal arts institutions currently have more expertise in these areas, and may be more willing to accept the "social" components of global public health as aligning with their traditional ideals.

A survey by the Association of Schools of Public Health and the Association for Prevention Teaching and Research indicated that approximately half of schools that had programs in public health at the graduate level offered undergraduate courses.¹⁵ A follow-up survey in 2008 identified 137 (16%) of 837 colleges and universities that offered a formal undergraduate major, minor, or concentration in public health.²² However, only nine of these programs were in liberal arts colleges. Just a year later, our systematic search of a limited sample has revealed marked growth in interest and formal offerings.

There are several points and recommendations that can be taken from the experience of teaching the short course and the review of global public health in the liberal arts. First, what was learned from teaching? Young adults early in their careers have a great capacity for understanding new and complex concepts. They ask difficult questions that reflect imagination and innovation as they consider solutions to global public health problems. The diversity of students' academic interests and life experiences, such as international travel and country of origin, brings richness to the discussion, and ultimately reflects the disciplines involved in global public health. Students who are not yet differentiated in their academic commitment often have a broadly open rather than narrowly focused approach. The discovery of evidence found in scientific literature and in documents of official international health bodies, such as the World Health Organization, is an important lesson for students as they seek information about global public health issues. This lesson can balance their passion for rapid results, with the practicalities and complexities of achieving change. There is merit in giving students an informed context through which they can consider global public health issues, such as reviewing the metrics that are applied to meet the Millennium Development Goals.

What about global public health in the liberal arts? We provide several specific suggestions for colleges as they consider introducing or expanding the discipline. Specific curriculum guidance and learning outcomes that can be adapted to the undergraduate setting are available elsewhere.^{21,23,24}

- Capture student enthusiasm and acknowledge their interest. And although enthusiasm is key, it is important to convey that enthusiasm alone will solve few problems. Students need to develop a skill that can be applied to tackling the challenges. By offering courses in global public health to undergraduates, students from all disciplines represented in the liberal arts can become informed advocates and understand how to apply their passion toward a career in this discipline or in any field of study. Career development has been an emphasis of the American Society of Tropical Medicine and Hygiene as increasing numbers of professionals pursue global public health.⁵
- Examine the curriculum and determine if there is enough representation and expertise within existing courses and faculty to develop an official track or concentration. If there is not a critical mass at a single college, is there the opportunity to join with nearby colleges? Several colleges have successfully done this by developing a consortium.
- Introduction of courses in global public health will enhance the ideals of liberal education^{8,13} by helping students acquire knowledge of human culture and the natural world through integrated study in the natural and social sciences, and the humanities and arts. Colleges can also introduce themes of global public health in existing courses to broaden their scope.
- Establish a support system (e.g., office of global public health studies) that coordinates interest, and aids students in choosing courses and finding service or research electives overseas or within the United States. This office should also provide oversight and due diligence for health and safety during overseas experiences. Most global health themes or minors include a requirement for a local or international experience. These extra-curricular opportunities complement and extend the influence of established courses, whether or not a college has a formal offering in global public health. Overseas experiences help students to understand the complexity of health interventions, the importance of involving local health providers, and the ethics of doing overseas collaborative work.^{25,26}
- Lend support to student organizations with a focus on health, community service and social justice. Interested faculty can be identified and act as advisors to develop initiatives and areas of focus.
- Coordinate invitations for outside speakers in the field of global public health. Provide a focus for career discussion, a key challenge for students as they explore careers in global public health.

Global public health interest has taken hold in many colleges within the liberal arts tradition. Pursuing this area formally and informally should enhance the breadth and quality of student education, and enrich the academic, social, and cultural atmosphere of the undergraduate college.

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Note: Supplemental tables appear at www.ajtmh.org.

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