

UN MDG/Global Health Education Research Resources

Kevin McCartney, Kile Brokop
UBC eHealth Strategy Office
Vancouver, BC, Canada

INTRODUCTION

Coming away from our meeting in Hong Kong in February of this year, we sought to move beyond evaluation of the UN Millennium Development Goals toward dissemination. We collectively identified education research as an important mode of that dissemination. Through developing common indicators and tools for our future research, we hope to build awareness and knowledge in our on-going attempt to achieve the Millennium Development Goals. With these ideals in mind, the eHealth Strategy Office is attempting to take a small first step. We hope this document and the accompanying presentation will provide a sense of the existing literature, identify gaps and consequent opportunities for MDG dissemination, and offer a chance to reflect on the role of this organization in capitalizing on those opportunities. Our work in this area is not meant to be exhaustive or definitive, but instead serve as a starting point to encourage further discussion and research. We believe this document provides a meaningful lens by which to evaluate the state of MDG education literature, and ultimately hope it will aid fellow researchers and educators in pursuing the dissemination of the UN MDG's toward a healthier and happier global community.

ABSTRACT

Literature on the use and evaluation of United Nations Millennium Development Goals in education is sparse. However, UN MDG-specific and UN MDG-themed education is occurring from across the entire education system under the banner of 'global health,' a fast growing topic since the year 2000. A review of educational evaluation literature in this area reveals that the field is new and diverse. Three divergent streams emerged within this literature that we label Program Evaluation, Pedagogical Evaluation, and critical, or Problematizing, Evaluation. Our literature review shows that the field of global health education is, at present, lacking cohesion and a shared research direction. Consequently, the UN MDG's have a strong potential to direct and structure future research and education in this area.

EXECUTIVE SUMMARY

Literature on the use of the United Nation's Millennium Development Goals in education is sparse at best. A handful of relevant articles exist in the gray literature, exploring North American education programs from Grade school to medical school. It became clear, however, that the broader term of 'global health' education included UN MDG-specific and UN MDG-themed education within it. For instance, in nursing, two independent but prominent models of global health clearly (if unintentionally) link the concept with the Millennium Development Goals (Hegyvary 2005 and Messias 2001, found in Carlton et al 2007). Not limited to nursing, this global health education is growing at ostensibly all levels of school as an institutional and informational imperative in a globalizing world. "The concept of global health is evolving with a growing recognition that international social, political, economic, environmental, and cultural issues affect health and health care around the world." (Carlton et al 2007, 124). Brewer et al (2009) report that 28% of recent medical school graduates in Canada and America participated in a global health experience, up from 22% in 2004 (Stanton et al 2008), 10% in 1998 (Brewer et al, 2009), and only 6% in 1984 (Stanton et al, 2008). Academic literature evaluating the successes and implications of global health programs is similarly on the rise. Empirical literature evaluating global health education programs can be readily distinguished into three categories for our purposes. Below is a brief synthesis of each of these categories.

First is a body of literature assessing the merit of various pedagogies used in teaching global health. The group of literature can be further separated, of course, but together represents evaluations of service-work, simulation, lecture/discussion, student-initiated, and technologically enabled modes of learning/teaching. Throughout this area of the literature, a strong belief in the value of social justice is evident, resulting in a focus on empathy as a primary learning objective. Crossover is made between personal outcomes for students and educational outcomes. Indicators of successful implementation include knowledge acquisition/retention, heightened self-perceived levels of empathy, compassion, and sense of responsibility, and measured levels of student involvement in community-level social justice (Hanson 2010; Wall and Edmunds 2009; Edmunds and Wall 2009; Tippet 2006; Krain and Lantis 2006). Tippet's frame is typical of this stream, asking, "How can educators help college students gain a global awareness and take steps to be responsible global citizens?" (Tippet, 2006, 1).

Second, a larger set of literature seeks to evaluate specific global health programs. The focus is on building appropriate competencies among medical professionals or the aptitudes of a 'global citizen' among students more generally. Typically in the form of case studies, evaluation is based on the ability of a given program to generate those competencies. Houpt, Pearson and Hall (2007) frame their study somewhat typically with the questions, "What exactly constitutes global health, and how much do U.S. and Canadian medical students or practitioners need to know about it?" Indicators of success are rarely explicit in the literature, but prominently include career choice (Anandaraja et al 2008; Oden et al 2010), self-perceived value of education (Villafuerte-Gálvez and Curioso, 2007; Burdick et al 2010), and student desire for global health content (Parsi and List 2008; Rego and Dick 2005; Drain et al 2007). Using these indicators, little evaluation of the education outcomes is achieved or really, even possible. Instead, priority is placed on the future success of students as measured by professional development.

Lastly, a series of articles serve to problematize the conception of global health as a field by presenting evidence on how the many programs offered across North America differ in their application and conception of Global Health curricula. In both medical (Jayaraman et al 2009; Izadnegahdar et al 2008) and nursing programs (Carlton et al 2007) across Canada and America, students are receiving markedly different courses and opportunities. Brewer, Saba and Clair (2009) contend that "[d]espite the substantial growth in global health activities at medical schools, the haphazard nature of this growth has contributed to a highly variable amount and quality of training across different medical schools' curricula" (932). As well, disciplinary boundaries in undergraduate education render the notion of a 'global health' field troublesome (Gillam and Maudsley, 2010). This state of flux suggests that evaluation research should perhaps include a reflection on what Global Health and the MDG's mean for each respondent. Moreover, the field is open for impactful direction by the use of the MDG's.

METHODS

Broad initial searches were made for literature on the topic of how the United Nation's Millennium Development goals are being taught in a variety of educational settings, with a focus on the health sciences. This approach did not prove fruitful and the search was modified to a second strategy, with a greater scope of *global health and education*. The emphasis in both of these searches was on tools or instruments that measure the effectiveness of instruction and learning of students, and the assumptions behind these tools. An iterative approach was used to identify key search terms and key authors and publications that the literature clusters around. We consulted a diverse medical and social sciences literature including education, psychology, international development etc. Gray literature was also consulted (Wall and Edmunds 2009; Edmunds and Wall 2009; Tippet 2006 among them). A UBC Librarian provided additional consultation around search terms and strategies. 50 articles were located by the end of our search. It should be emphasized that the scope

of this project was limited and should be considered a platform to inspire and inform future research directions around global health and the UN MDG's. The following major databases and indexes were consulted: EBSCO (ERIC), Academic Search Premier Complete, ISI Web of Knowledge/Web of Science, PyscInfo, Education Resource Complete, Education Index Fulltext, NIH's PubMed/Pub Med Central, JSTOR, Google Scholar/Google, MetaLib

Primary search terms

- All 8 UN MDG's service learning
- global citizenship
- evaluating global health education
- international health education
- Canadian health education
- health knowledge, attitudes, practices
- global health
- development
- curriculum
- GHE's (Global health experiences)

SIGNIFICANT CONTRIBUTIONS FROM THE LITERATURE

<u>Authors</u>	<u>Title</u>	<u>Publication Info</u>	<u>Description of Instrument</u>
Haupt, Eric R. MD; Pearson, Richard D. MD; Hall, Thomas L. MD, DrPH	Three Domains of Competency in Global Health Education: Recommendations for All Medical Students	Academic Medicine , Association of American Medical Colleges: 82(3), March 2007, pp 222-225 ,	The authors propose three domains of global health competency that each medical school curriculum should try to achieve for all students: global burden of disease, traveler's medicine, and immigrant health. The authors present here the rationale for altering curricula to include these three topics as a starting point for discussion among medical educators. Although this is not a measure yet, further refinement of the three competencies suggested (to provide actual measures) will create a useful tool for evaluating GHE's and medical curriculum around UN MDG's.
Anandaraja, Natasha MD; Hahn, Sigrid MD; Hennig, Nils MD, PhD, MPH; Murphy, Ramon MD, MPH; Ripp, Jonathan MD	The Design and Implementation of a Multidisciplinary Global Health Residency Track at the Mount Sinai School of Medicine	Volume 83(10), October 2008, pp 924-928: Academic Medicine	Several measures are being used at the Mount Sinai GHRT to conduct program evaluation: online and in-class evaluations, focus groups, longitudinal study tracking career outcomes, etc.
Brett D. Nelson, MD, MPH,a,b, Anne CC Lee, MD, MPH,a, P. K. Newby, ScD, MPH, MSc,d, M. Robert Chamberlin, BS, MBAe, Chi-Cheng Huang, Mda	Global Health Training in Pediatric Residency Programs	Pediatrics , 2008, 122, 1, 28	The online survey consisted of 24 primarily closed-response questions that assessed resident interest in global health, available global health opportunities, number of residents who recently participated in global health electives, presence of a formal global health track, curricular content, support provided for participating residents, faculty involvement in global health, and amount of call-free elective time available to residents. Descriptive and inferential analyses. goal was to describe current resident interest, participation, curricula, resources, and obstacles related to global health training within pediatric residency programs.
W. P. Burdick; D. Diserens; S. R. Friedman; P. S. Morahan; S. Kalishman; M. A. Eklund; S. Mennin; & J. J. Norcini	Measuring the effects of an international health professions faculty development fellowship: the FAIMER Institute	Med.Teach. , 2010, 32, 5, 414-421	Professional development focus: "Foundation for Advancement of International Medical Education and Research (FAIMER) initiated the FAIMER Institute, a fellowship program for mid-career faculty members from health professions schools in developing countries in Latin America, Africa, and Asia" (415)
Drain, Paul K. MPH; Primack, Aron MD, MA; Hunt, D Dan MD, MBA; Fawzi, Wafaie W. MB, DrPH; Holmes, King K. MD, PhD; Gardner, Pierce MD	Global Health in Medical Education: A Call for More Training and Opportunities	Acad.Med. , 2007, 82, 3, 226-230, United States	No explicit evaluation strategy identified, however this is an article of central importance and is heavily cited by the global health education literature. Article does present empirical information on increase in interest in global health programs and existing programs worldwide.

Edmunds, J. Spencer and Wall, Amanda	Exploring Global Poverty	Educational Leadership , 2009, 66, 8, 78-80	Anecdotal evaluation of UN MDG based unit designed to impact students' social responsibility and identification with social justice
Sudha P. Jayaraman MD, MScA, Alexander L. Ayzengart MDa, Laura H. Goetz MD, FACSb, Doruk Ozgediz MD, MS	Global Health in General Surgery Residency: A National Survey	J.Am.Coll.Surg. , 2009, 208, 3, 426-433	In 2007 to 2008, a nationwide survey of program directors at all 253 US general surgery residencies using a Web-based questionnaire modified from a previously published survey. The goals of global health activities, type of activity (ie, clinical versus research), and challenges to establishing these programs were analyzed.
Gillam, Stephan and Maudsley, Gillian	Public health education for medical students: rising to the professional challenge	J.Public Health (Oxf) , 2010, 32, 1, 125-131, England	Authors argue that global health education in the UK is fledgling and requires a greater level of focus and coordination. Definitions of global health, curricula focus is scattered and needs increased attention. Evaluates the progress made in undergraduate global health curriculum implementation in the UK.

KEY POINTS

- UN MDG literature and global health education literature are both fragmented, which presents challenges to identify key authors, research questions or points of collusion within the literature (this reflects the diversity of programming that exists today)
- Medical students demand for GHE's (global health experiences) is strongly demonstrated (one of very few points of collusion)
- There should be a greater focus on research on developing countries
- To the best of our knowledge, no meta reviews exist on the topic of education around global health or UN MDG's
 - Global health education consortium did complete a literature review dealing with similar topics, however there is no analysis or synthesis of the literature
 - One of our articles attempted this in 2003 (Thompson) and found 8 articles
- There is little to no dialogue between various 'streams' of the literature (i.e. the three P's)
 - i.e. although the problematising literature responds to the program evaluation literature, the P.E. literature does not engage the problematising lit
 - there are vastly different assumptions and ideologies at play in these fields which makes any sort of comparison challenging
- Growth in the sophistication and specialization of 'global health' education, from international perspectives on medicine (Urkin 2001; Najam 1999) to a more complex model of interconnection between the global and local, and between health and social advantage (Drain et al 2007; Barbiero 2008; Coontz 2009)
 - "The concept of global health is evolving with a growing recognition that international social, political, economic, environmental, and cultural issues affect health and health care around the world." (Carlton et al 2007, 124)
- At the undergraduate level global health is hailed as interdisciplinary (Oden et al 2010; Barbiero 2008; Bernheim et al 2008), but little work exists offering opportunity for interprofessionality
 - Exception: Very new professional development program called FAIMER (Burdick et al 2010)