Introduction

The following articles have been identified by members of the Physician Assistant Education Association International Rotations Subcommittee as relevant to international clinical education and global health. The purpose of this annotated bibliography is to provide Physician Assistant (PA) educators with a selection of articles that may promote a comprehensive, evidence-based approach to international clinical education and global health in entry-level PA education programs. The literature review was conducted in 2014 and represents only a selection of the total and growing amount of literature on these and related topics. Educators are encouraged to utilize this resource as a starting point then conduct their own literature review based on their own needs and for more recently published articles.

The search was carried out on PubMed using the following keywords: global health, curriculum development, international rotations, medical education curriculum, physician assistant curriculum

   Annotation: This article describes the Working Group on Ethics Guidelines for Global Health Training (WEIGHT) set of guidelines for institutions, trainees, and sponsors of field-based global health training on ethics and best practices in this setting. The working group encourages efforts to develop and implement a means of assessing the potential benefits and harms of global health training programs, including to institutions, personnel, trainees, patients, and the community.

   Annotation: This guideline from the American Academy of Family Physicians provides strategies to help medical residency programs establish a global health curriculum. The specific goals are categorized as competencies, attitudes, knowledge, and skills. Suggestions for implementing a global health curriculum are included.

   Annotation: This article reports the evaluation of an introductory case-based curriculum entitled, “Ethical Challenges in Short-term Global Health Training.” The results describe the utilization of these internet-based cases, types of visitors, and survey evaluation of the 10 cases. It also provides access to the cases which are publicly available.

Annotation: This article attempts to define ‘What exactly constitutes global health, and how much do U.S. and Canadian medical students or practitioners need to know about it?’ The author’s identify three domains of global health competency and recommend that all medical school curriculums include these basic areas: 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’. They do acknowledge the increased interest in medical student’s desire to ‘participate in global health electives’ but also acknowledge that it may not be possible to integrate as much detail on these areas for all students. Instead they propose that schools ‘need to separate the educational needs of the highly interested group of students who participate in global health electives from the core competency in global health needed by all.’ They do point out the importance of including these 3 domains into the general curriculum because of the affects that they have on everyone in medicine due to the increased immigrant populations found not only in urban but also in rural areas of the US. The global burden of disease does affect us here in the US as does tourists who do either come to the US or those of us who do travel abroad.


Annotation: This short article explored a new mandatory course introduced in 2010, for all first year medical students at John Hopkins University School of Medical (JHUSOM). It introduced ‘basic global health concepts’ using an online course structure and it also involved video conferencing between the JHUSOM and medical students and faculty in Uganda, Ethiopia, Pakistan and India.

It was a 4 day course which addressed the following:

1. The need for an integrated, interdisciplinary approach to global health problems
2. The challenges and opportunities for global health issues to impact clinical practice.
3. Why a global perspective is needed to solve public health problems
4. To critically examine global health issues, as they are encountered in future practice and training, especially with regards to immigrant and travelers’ health (the authors refer to the article above)
5. To identify, describe and discuss six major global determinants of health: Global burden of disease; Healthcare delivery systems; the environment and health; Health and human rights; Social determinants of health; Health policy, programs and health.
The conclusion stated in the abstract notes: “Distance learning can support unique, high-quality medical educational experiences that leverage technology and global connectivity, but also the power of group learning and “South-to-North” capacity building.”

This is a useful resource for PA programs that might be looking for other approaches to introduce global health training/education, especially for those students who may not have the opportunity to travel overseas. This is an excellent way to bring health care students together without necessarily traveling overseas. It would also afford PA programs (and the PAEA) to educate other countries about our profession.


Annotation: This article describes a course developed to focus on clinical knowledge and skills needed by medical students and residents traveling overseas. There was particular focus on management of the leading causes of the global burden of disease and applying these in resource-limited settings. Various methods of instruction were used: “didactics, case studies, skills sessions, and mentorship.” The article gives details of the content of the course including the various practical exercises that were conducted during the sessions: for example, making an asthma inhaler from plastic/disposable water bottles etc..


Annotation: This article lays out an initiative developed by a working group comprised of global health educators from Ontario’s six medical schools. They conducted a scoping review of global health curricula, competencies, and pedagogical approaches and produced an evidence-informed interactive framework to provide a shared foundation to guide the design, delivery and evaluation of global health education programs for Ontario’s family medicine residency programs. “Enabling competencies specify the behaviours, skills and attitudes that learners must demonstrate to reach the Canadian Medical Education Directives for Specialists (CanMEDS) competencies.”

Components of Global Health Education Framework
1. Definition of Global Health
2. Mission of Global Health
3. Principles and Values: Identifying Core Values and Principles for Global Health and Family Medicine Education. The eleven defining values and principles for global health were: Social justice, sustainability, reciprocity, respect, honesty and openness, humility, responsiveness and accountability, equity, and solidarity.
5. Curriculum delivery: Determining unique learning approaches for global health training relevant for an education framework (seminars, problem based learning sessions, small study groups, individual readings, simulations and eLearning modules.)

6. Mentorship

7. Service Learning and Practice Settings

8. Evaluation


Annotation: This article addresses three areas of debate in global health that the authors feel are important for those who teach global health to be aware of. These are: ‘What the object of knowledge of global health is, the types of knowledge to be used and around the purpose of knowledge in the field of global health.’ They stress the importance of “paying attention to the differences as well as commonalities in different parts of the world”. “Second, global health’s core strength lies in its interdisciplinary character, in particular the incorporation of approaches from outside biomedicine.” This is such a crucial point that educators must be aware of and pass on that knowledge to the students. Many in health care and especially those who travel on medical rotations for the first time are under the impression that all it takes is giving a medication, performing surgery etc. is all that is needed. However, this is far from it and it takes engineers, architects, teachers, public health personnel as well as health care professionals to provide health care. “This approach recognizes that political, social and economic factors are central causes of ill health.” “Last, we argue that definition should avoid inclusion of values.” With this the authors illustrate that what constitutes Western values, for example equity, may not necessarily translate the same in another culture/society.” They caution that, though values should be very much a part of the discussion in curricula, it should not be necessarily a part of the definitions of global health.


Annotation: In this article the authors go into more detail about the different types of doctors that might be interested in global health work and how to approach the teaching and curricula in these situations. They focus on how global health education in the UK has changed and through a survey, worldwide. They refer to the ‘globalized doctor’ - who is primarily based within their own health system , ‘humanitarian doctor’ and ‘policy doctor’ – will all become recognized and valid categories, so predating training in the broader social, economic and political aspects of global health. This teaching needs to be inserted into medical curricula in different ways, notably into core curricula, a special overseas doctor track, optional student selected components, elective programs, optional intercalated degrees and postgraduate study.”

They suggest inserting this knowledge into the

1. Core curricula – “cultural and social issues within professional development courses and medical sociology; Many are also currently taught from a national perspective but have
the potential to be globalized (public health teaching on the social determinants of health)”
2. Creating special overseas doctor tracks
3. Optional student selected components where the student decides on an area of particular interest to them in the global health field
4. Elective programs or international rotations
5. Optional degrees are offered (BSc or MSc in International health)
6. Postgraduate courses – To include MSc/MPH and doctorates.

PA programs may want to also look at the different areas students want to ‘go’ - whether it is back to their country of origin (with more countries looking at the PA model this may indeed be possible for many), whether it is for those who want to continue on in medical services overseas, working in the armed forces etc., and for those who want to be involved in creating policy changes.