

# International Medical Education Outreach: Benefits for US Medical Education and Practice

*An Interview with Joseph Kolars, MD*

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## Where Does Medical Education Fit in the Effort to Address the Health Care Needs of Sub-Saharan Africa?

Much of the focus in Sub-Saharan Africa has been on aid that mitigates the burden of major infectious diseases such as human immunodeficiency virus (HIV), malaria, and tuberculosis. There also is increasing support for the scientific community to generate discoveries that better address these epidemics. Concurrently, there is a growing understanding of the need to invest in mechanisms and policies to establish a health care work force, which is currently quite scarce throughout the developing world. A wide variety of health care workers are required; physicians hold a particularly important leadership role on the health care team. There is a profound shortage of medical schools, and their current enrollment is insufficient to address the needs of the region. These shortfalls are further compounded by emigration of graduates out of the region, most often to pursue postgraduate training in residencies and fellowships that are not available in their own countries. One of the consequences of this training is that these physicians no longer “fit in” back home and many do not return. Rather than focus on the mechanisms that cause physicians to leave Africa, there is a growing realization of the need to import education and training programs into the region. These opportunities have also attracted the attention of schools and organizations in the United States, along with funders interested in the improvement of health care in Sub-Saharan Africa.

Instead of exporting systems and curricula that seem to work in the United States, there is a need to develop programs and pathways in these countries that directly link education to desired local health care outcomes. For example, increasing the emphasis on management of obstructed labor or the performance of adult circumcision (which has recently shown to have a dramatic impact on HIV transmission) will have a substantial impact on health outcomes.

## What Types of Outreach Programs Focus on Resident Education in Sub-Saharan Africa?

Several initiatives come to mind. There are organizations and foundations that are committed to transforming health through education. For example, the Foundation for Advancement of International Medical Education and

DOI: 10.4300/01.01.0027

Research (FAIMER) has made a crucial contribution to developing educators in Sub-Saharan Africa, with an impact on undergraduate, postgraduate, and continuing medical education in the region. Another example is Accordia Global Health Foundation, which has done a remarkable job with training programs in Uganda around HIV care that now is being exported to other countries.

There are multiple examples of institutions and training programs in the United States that have established focused partnerships to strengthen the training environment in specific countries. Indiana University’s work in Kenya and Yale’s partnerships with Liberia and Uganda are particularly noteworthy. I’ve been quite impressed with institutional commitments to develop entire residency programs. Through a partnership with George Washington University, Eritrea now has its first pediatric residency program. Collaboration with the University of Michigan resulted in an obstetrics/gynecology residency program in Ghana that has graduated over 40 trainees, almost all of whom have been retained in Ghana.

The Bill and Melinda Gates Foundation has made a few learning grants to explore partnerships that will strengthen education and training programs. These support the University of California-San Francisco’s work with Muhimbili University in Tanzania, Johns Hopkins’ work with Makerere University in Uganda, and the University of Michigan’s work with Ghana. Each of these includes a focus on strengthening graduate medical education in that country. The main focus with these grants has been to test what works and to accumulate evidence that could be generalized to other initiatives. Although there is some understanding of what medical schools exist in Sub-Saharan Africa, there is scant information on the state of graduate medical education or pathways to certification across the region.

## Are There Efforts to Create Educational Opportunities in Developing Nations for US Residents and Fellows?

There has been a real surge of interest among medical students and residents in global health. This has resulted in numerous activities, as well as a growing awareness of the need to avoid efforts that largely focus on “medical tourism” or that focus more on providing brief “aid” instead of contributions that are more enabling and long term. There are a growing number of residency programs,

particularly in internal medicine, and fellowship programs, particularly in infectious disease, that offer formal or informal global health tracks. For example, as part of its participation in the Review Committee for Internal Medicine's Educational Innovation Project, the University of Pittsburgh developed a global health pathway that includes rotations in developing countries. The University of Washington is another example of an institution that is making great strides in providing meaningful, authentic experiences for students and residents. And there is a long list of institutions developing these opportunities. A good resource for those interested in these efforts is the Global Health Education Consortium (<http://globalhealthedu.org/pages/default.aspx>).

### **What Attributes of These Outreach Efforts Are Important to Program Directors and Institutional Leaders?**

There is a huge recruitment advantage to those who offer global health as a dimension to their programs. Many students and trainees want to get beyond the United States' privileged position and make humanitarian medical outreach part of their life's work. As a medical student, I went to India and worked with Mother Teresa in her home for the dying in Calcutta. I still consider this one of my most meaningful experiences in medicine.

Culturally sensitive care in another nation challenges learners' assumptions and teaches cultural competence, while teaching them to be effective without the resources available in the United States. It takes residents out of their comfort zone and shows them how to practice medicine in a different context. I firmly believe that approaches developed or learned in other nations, once they have demonstrated success, could be applied to transform US health care. I'm impressed with how some in the quality and safety movement are taking their work to Sub-Saharan Africa to test ideas and establish what works. In this environment, they have an opportunity to work on "new design" rather than "redesign" in the absence of accompanying resistance from stakeholders in the United States. We're all wrestling with how to develop cost-effective care and the education systems that are needed to improve the health of the communities they serve. Finally, there are terrific educational opportunities with diseases and settings that are less common in many of our current training programs.

There are barriers to global health work for our residents. They include the lack of graduate medical education funding for resident time spent overseas, and the fact that certifying boards do not recognize time spent outside the United States. To help overcome these barriers, resident engagement in developing nations must be able to demonstrate value to home institutions and professional societies. Humanitarian efforts overseas are important, but are difficult to afford with all of the current pressures on the US health care system.

### **How Does Participation in International Initiatives Benefit US Education and Practice?**

There are real benefits that make experience in developing countries valuable for US graduate medical education. When physicians learn and provide care in developing countries, they have to explicitly link education, disease patterns, and health outcomes in the adaptation of the educational curriculum to local circumstances. In a region in which the life expectancy is 48 years, it does not make sense to devote large portions of the curriculum to Alzheimer disease. Curricula need to be tailored to local needs. The benefit for academic medicine is that performance is assessed as desired health outcomes, not board certification scores or other indicators focused mostly on educational success. The effect of circumcision on HIV infection rates is an example that suggests that medical education can be targeted to the local health care needs and desired outcomes.

### **What Is the Role of Technology in International Graduate Medical Education Outreach?**

Exploration into how telemedicine and tele-education may assist developing countries, particularly those in Sub-Saharan Africa, is an exciting development. There is a critical shortage of medical faculty on the African continent. However, an impressive fact about Africa is that the learners are highly motivated. This creates opportunities for the design of curricula and educational modules that are more self-guided than many that are used in the United States. One particularly intriguing initiative focuses on the Open Educational Resources movement, which allows the sharing of commonly created learning materials across multiple institutions. Tufts University has been working extensively on this in East Africa, and several institutions have been working with the University of Cape Town in South Africa. I believe this movement will have a dramatic impact on how education is delivered and learning takes place in Africa. This will likely have important lessons for us in the United States. However, Internet access in Africa is slow, and it is 5 to 10 times more costly than in the United States. This is about to change; efforts are being made to enhance Internet capabilities that will give a number of East African countries access to online systems for tele-medicine, education, and mentoring.

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*Note: FAIMER is a nonprofit foundation committed to improving world health through education. Established in 2000 by the Educational Commission for Foreign Medical Graduates, it promotes international health professions education through outreach and research activities focusing on South Asia, Africa, and Latin America.*