

## Code Blue from the Resident and Fellow Section of the AMA



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# The Impact of International Health and Humanitarian Medicine on US Graduate Medical Education

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Dear Colleague,

During the course of their postgraduate training, almost all residents and fellows in the United States will listen to various presentations on international health topics. Many of the lectures will be delivered by fellow trainees (describing their own international healthcare electives), colleagues (discussing unusual patients in foreign settings), or guest speakers who specialize in a particular health-related aspect of another country. Globalization in medicine has accelerated over the past decade, in part because of the rise of the Internet, the increasing availability of foreign travel, and the growing concern for improving the health of less-fortunate populations. This trend has also been borne out in US medical school training. In 2006, more than 27% of graduating medical students participated in an international health experience (IHE), compared with a mere 6% of graduates in 1984.<sup>1</sup>

The increased exposure to global health training in medical school and the growing interest of residents have led training programs to focus on IHEs. This emphasis has manifested itself in several ways—providing accessible funding sources, procuring new faculty members who have international experience, and promoting longstanding global health electives to prospective trainees. For example, a 1998 survey showed that 43% of all US residency programs in family medicine offered international health electives or encouraged residents to participate in such programs.<sup>2,3</sup>

But the promotion of IHE does not come without consequences. In the current era of managed care and budget shortfalls, the financial commitment required to provide residents with meaningful IHEs is significant, especially when factoring in the perceived loss of personnel resources. IHEs can also expose residents to health and safety risks, given the prevalence of communicable diseases in the developing world.<sup>4</sup> Keeping these factors in mind, a resident who is considering going abroad may ask questions such as:

- Is international health of great consequence to us as physicians?
- Is participating in an IHE worth the potential risks?
- If so, what steps should a resident take in preparing for an IHE?
- Are there any changes we can make to help promote IHEs in our residency programs?

### The Importance of International Health

As the globalization movement continues to spread worldwide, the health sector has been changed profoundly by our collective interdependence. This has led some to suggest that the education of today's physician cannot be through the lens of an orthodox, disease-focused model; rather, a doctor must also be informed about the broader political, economic, and social factors that are intertwined with international health.<sup>5</sup> The global tragedy of the HIV/AIDS pandemic, the current controversy over international pharmaceutical patents, and the increasing need for humanitarian medicine in many war-torn nations (eg, Rwanda, Darfur, and Afghanistan) continue to provide evidence for this idea.<sup>6</sup>

Urban populations have become much more diverse, and US physicians are now managing patients from many other countries. International travel has also increased, thus complicating the control of communicable diseases and heightening the need for specific travel-health information. Due in large part to the rise of the Internet, information now travels at lightning speed, allowing scientific articles to be written and quoted far from a source country.<sup>6</sup>

This increasing interdependence led to the development of the concept of "global public health security," defined as, "The activities required, both proactive and reactive, to minimize vulnerability to acute public health events that endanger the collective health of populations living across geographical regions and international boundaries."<sup>7</sup> Armed with the facts that airlines carried more than 2.1 billion people in 2006, and that new diseases are emerging at the historically unprecedented

rate of 1 every year, the World Health Organization made "global public health security" the theme of its 2007 World Health Report.<sup>7</sup> Implicit in the concept is the idea that a world in which large, growing populations are denied access to adequate healthcare is a world that will inevitably become less secure. Through our interdependence, the instability of the health sector in disadvantaged nations can have a profound effect on the health of America and the entire international community.<sup>6</sup> The human immunodeficiency virus (with its origins in Africa) is just one sobering example.

### Benefits of Training in International Settings

One way to make a significant impact in our interconnected world is to begin exposure to an international setting early in your medical career. In addition to broadening young physicians' understanding of the forces that shape the global society, an IHE has many practical and clinical advantages. By working in an international setting with a scarcity of resources, a resident is forced to rely on (and strengthen) his/her clinical abilities, thereby reducing dependence on laboratory and radiologic testing. Problem-solving, physical-examination proficiency, laboratory expertise, and foreign-language communication are skills that are also enhanced during an IHE.<sup>4</sup> The diversity and severity of pathology in international disadvantaged settings provide invaluable learning experiences that are sometimes difficult to obtain in industrialized nations. A recent study of a pediatric IHE in South America showed that 18% of the different diagnoses had never been seen by US trainees, and 6% of the patients had illnesses in advanced stages not previously encountered by US residents.<sup>8</sup>

In addition, residents who participate in an IHE often learn of cross-cultural issues, alternative health concepts, and varied forms of healthcare delivery.<sup>3</sup> This can have a profound impact on residents' attitudes, values, and outlooks in the aiding of underprivileged populations and in the areas of international service and humanism. IHEs may encourage residents to think about broader societal issues, temporarily shifting their focus away from disease management, and maintaining their enthusiasm toward their training.<sup>6</sup> Studies have also shown that IHE participants (compared with nonparticipants) are more interested in areas of public health, working with underserved populations, or foregoing further specialized training. A study of more than 80 internal medicine residents demonstrated that 56% of IHE participants remained in general internal medicine, whereas only 31% of non-IHE participants deferred subspecialty training.<sup>4</sup> Furthermore, only 13% of residents who went abroad eventually found themselves in a private practice/HMO setting compared with 27% of nonparticipants.<sup>4</sup> As specialist training becomes the norm for many, the promotion of IHEs could help reemphasize the importance of generalists and possibly improve healthcare access in America.

### Current Challenges

Although the potential benefits of IHEs can range from improved clinical skills to profound career-changing experiences, much remains to be done to promote these opportunities in graduate medical education. Despite the recent expansion of global health opportunities in a variety of residency programs, the opportunities noted can be unstructured and are often based on the international contacts of individual faculty members. A recent review shows that the literature contains relatively little information on pediatric IHEs and how they are organized, which prevents the widespread dissemination of current electives.<sup>8</sup> Another review reveals that very few US surgical residencies have established rotations, which prevents IHEs from obtaining longstanding "consistency and sustainability."<sup>9</sup> Most residents who have participated in IHEs can attest that one must have a true passion for the experience, because the logistic and organizational challenges can be daunting even for the seasoned traveler.

That said, many "cutting-edge" US residency programs have responded to the call for more structured and sustainable international opportunities by creating formalized training programs that involve many faculty members. For example, the University of Pittsburgh's internal medicine residency program contains a global health track (GHT) that strives to train young physicians with a strong generalist perspective and heightened clinical abilities.<sup>10</sup> The GHT assigns each resident a mentor in the resident's country of interest and has structured opportunities in various parts of the world. In addition, the GHT offers a biweekly global health conference series (on topics of international health) and requires that all trainees complete a scholarly project on a global health issue. Previous projects have involved health services research, community-needs surveys, and health advocacy papers.<sup>10</sup> The University of Pittsburgh is not alone; GHTs (or their equivalents) are available in many pediatric, internal medicine, emergency medicine, and family medicine programs across America.

The challenge for future graduate medical education will be to promote current opportunities to students and residents in a more organized fashion. This could potentially lead to more structured institutional collaborations, which would facilitate the participation of even greater numbers of residents and fellows.

### How to Integrate International Health into Your Training

Young physicians who desire to augment their educational programs with global health training can pursue different routes. Opportunities are available for every resident, even if your respective program does not offer structured IHEs. Many faculty members from other institutions are willing to help, and structured independent programs exist.

Before starting the "search" for a suitable IHE, reflect on your interests and the part of the world you are interested in. Perhaps you have a desire to work with HIV-infected populations in South Africa, or maybe you want to perform cleft palate surgery in a South American community. Whatever your desires, having a directed sense of your own interests is almost required before exploring various possibilities. Once you have a general idea of where you would like to serve, consider the following steps that will enhance your education and help you leave a legacy for your own program:

### **1. Take advantage of opportunities**

The world is your oyster. Many prospective electives exist, and a few structured rotations may be found at your home hospital/institution. Some of your staff physicians will have experience with international health and can put you in contact with someone who works in an area of the world in which you are interested. Remember to be flexible—it is sometimes difficult to match your interests with faculty members you come in contact with. But don't worry; other avenues will arise in your discussions, and these conversations will spawn new opportunities.

A plethora of resources exist. A great place to start is the American Medical Association–Resident and Fellow Section (AMA-RFS) website ([www.ama-assn.org/ama/pub/category/12557.html](http://www.ama-assn.org/ama/pub/category/12557.html)), where you will find listings of organizational contacts, possible international electives, and academic institutions with global health opportunities.<sup>11</sup> These resources will give you a few contacts that you can pursue to reach the destination of your choice. Never worry that you are contacting institutions that are not familiar with you. There is a strong kinship among physicians who pursue international health opportunities, and it is more than likely you will find helpful mentors at other hospitals.

No matter where you finally decide to go, you will need to obtain your program director's approval. This can be easy if it is an elective offered by your own institution. But if you're pursuing an IHE that is not sponsored by your home program, you'll have to obtain/develop your own travel directions, elective objectives, and maybe even a source of funding. Your program director will need to ensure you are pursuing an educational objective; you can "sell" your elective by illustrating the enormous educational potential of working for a short period in another country. Remember that you may have a few "hoops to jump through," because some institutions and countries require a significant amount of completed paperwork before authorizing a physician to work in an international setting. Never forget that the hardships are worth it all in the end; your training program will come to view you as a trailblazer who championed an international rotation in a new part of the world.

### **2. Seek different funding sources**

Don't be discouraged by the costs of your IHE. Your residency program will often sponsor the costs of your elective, especially if a research component is involved. An example of other outside funding sources is the Yale/Johnson & Johnson Scholars Program, which annually selects 15 physician-in-training scholars from institutions outside of Yale to participate in 4- to 8-week rotations in overseas sites. Based on site assignment, Yale/Johnson & Johnson physician scholars can receive a travel award ranging between \$1,000 and a maximum of \$5,000.<sup>12</sup> The AMA-RFS can also help if your international elective could be tied to one of its current funding opportunities.<sup>13</sup>

### **3. Leave a lasting legacy**

While at your international site, you may consider keeping a daily record of various patients and meaningful encounters. You may never see certain pathologic entities again, and a log of certain cases can be of significant educational value to you and your colleagues. After returning from an IHE, embrace the opportunity to present your experiences to faculty and other trainees. International health is held in high regard in the medical world, because serving disadvantaged populations in foreign environments appeals to physicians' sense of volunteerism and service. Furthermore, the discussion of your global health experience is likely to inspire others to also consider IHEs as part of their medical education.

For those aspiring to make an even larger impact, one possibility may be to strengthen the venues by which young physicians in your training program discover more about IHEs. Your experiences will naturally lead you to uncover a number of potential improvements that could help promote a smoother process for those that come after you. Discussions with other faculty members and residents will likely lead to other ideas and could culminate in your authorship of a brief institutional manual on IHEs. The legacy you would leave at your residency program would be significant, and would likely motivate other residents to follow in your footsteps.

Another way to leave a lasting legacy is through the publication of your experiences in a referenced journal. Your experiences can easily serve as the foundation of an interesting article that sheds light on the broad medical challenges of a severely underprivileged community. Furthermore, your published insights may encourage others to travel to your area of interest and to continue working on the issues you raise. Because relatively few articles on the educational aspects of IHEs are available in the current medical literature, your thoughts could have a significant influence on many training programs around the world.

Postgraduate training passes extremely fast. If you want to learn more about the international community, make an impact in a part of the world that is desperate for help, and leave a legacy that will inspire others, an IHE may be the best place to start. With a little passion and perseverance, you will be able to find a niche in just about any part of the world.

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*The views expressed in this article are those of the author and do not necessarily reflect the official policy or position of the Department of the Navy, Department of Defense, or the US government.*

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