

Open Letter to Young Surgeons Interested in Humanitarian Surgery

IN RECENT YEARS, SURGERY has been recognized as an essential component of global health.¹ Many American surgeons work for humanitarian organizations or academic surgical departments that provide surgical care and training in resource-limited settings. Interest by trainees in practicing surgical care in resource-limited countries is unprecedented.² Establishing a career in this field is challenging, but opportunities to gain experience have dramatically increased. The following are 10 suggestions for medical students and surgical residents to prepare for a career in humanitarian surgery.

TEN STEPS TO PREPARE FOR A CAREER IN HUMANITARIAN SURGERY

Participate in a Global Health Project as a First-Year Medical Student

Identify a supervising faculty member and get involved in his or her international research project. I worked on a leptospiral uveitis project at the Aravind Eye Hospital in India during the summer between my first and second years of medical school, and this experience inspired a lifelong career in global health.

Learn a Foreign Language

Learn the primary language of the region where you want to work. Many humanitarian surgical missions are in West and Central Africa, where at least a basic knowledge of spoken French is essential. If you want to work in Latin America, take a medical Spanish class. As the Middle East and North Africa are becoming

more accessible to humanitarian surgeons, Arabic is also useful.

Take an International Clinical Elective Course After the Third Year of Medical School

In the final years of medical school, arrange an international elective at a clinic or hospital in the developing world for 3-12 months. The American Medical Student Association³ maintains databases of international electives and provides useful information on funding opportunities. Many medical schools have established electives at specific international sites. After my third year, I participated in rotations in Chile, Honduras, Kenya, and Lesotho and saw surgical pathologic phenomena I had only read about in textbooks. I watched astute clinicians diagnose patients through history and physical examinations alone (no computed tomographic scanners!) and perform operations expeditiously and safely without electricity or other modern equipment. Participation in health care delivery in a resource-limited setting is the best way to decide whether this is the career path for you.

Get a Masters Degree in Public Health/Global Health

Many medical schools have joint programs with partner institutions. A Master of Public Health degree will provide the framework to understand the role of surgical care within public health and the epidemiological skills needed to conduct research in global surgery. Pick a program with an emphasis on global health such as the London School of Hygiene and Tropical Medicine, the Harvard School of Public Health, or the Johns

Hopkins Bloomberg School of Public Health.

Choose a Surgical Residency With Well-Established Global Health Links

Many surgical residencies have strong links with academic surgical departments in Africa or other resource-limited places. Others have established relationships with nongovernmental organizations that provide humanitarian surgery (Brigham and Women's Hospital with Partners in Health) or global health programs (University of California, San Francisco with Global Health Sciences). Others have residency directors with extensive international experience (such as John Tarpley, MD, of Vanderbilt University).

Find a Surgical or Nonsurgical Mentor With Global Health Interests

Early in your surgical residency, find a surgical or nonsurgical mentor with global health interests and allocate at least one research year with him or her. The safety of surgical care in resource-limited settings and the burden of surgical disease are 2 areas of current research interest. Funding is still a challenge, but opportunities are increasing. Programs such as the Paul Farmer Global Surgery Fellowship⁴ are in their infancy but provide a structured service delivery and research experience in humanitarian surgery.

Arrange an International Elective During Residency

This is challenging to do because international rotations do not count toward the Accreditation Council for Graduate Medical Education

(ACGME) requirements for the completion of surgical residency. Many programs only allow residents to participate during their research years. However, some residencies already have established connections with international hospitals and creative funding sources. For example, the Orthopedic Trauma Institute at the University of California, San Francisco allows its residents to rotate at the Bedford Orthopedic Health Centre in South Africa during their 4th year, and travel expenses are offset by a fund established by alumni and industry.

Attend Global Health and Surgery Meetings

The Clinical Congress of the American College of Surgeons (ACS) has several sessions on humanitarian surgery. The ACS also sponsored the 2nd annual Global Burden of Surgical Disease meeting from April 20-22, 2009. Other meetings include the Symposium on Disparities in Surgical Care sponsored by the Brigham and Women's Center for Surgery and Public Health⁵ and the Bellagio Essential Surgery Group conferences.⁶

Pick Your Area of Interest and Do Extra Training in That Surgical Subspecialty

Surgeons with extra training in many subspecialties are needed in resource-limited settings. Groups such as Médecins Sans Frontières⁷ and the International Committee of the Red Cross⁸ provide emergency surgical care in places of conflict and disaster as well as establish their own hospitals or work closely with local ministries of health to improve the quality of surgical health facility infrastructure. Extra training for surgeons in obstetrics and gynecology, orthopedics, and trauma care is invaluable. Groups such as Interplast⁹ provide specialty surgical care (such as cleft palate repair) and thus need plastic and reconstructive surgeons. Organizations such as the Pan-African Academy of Christian Surgeons¹⁰ are committed to training African surgeons in Christian mission hospitals in East and West Africa; they depend on expatriate

general and subspecialty surgeons and trainers.

Pay Student Loans Early

Many positions in humanitarian surgery are voluntary or only pay small stipends. Not having large student debts will give you the flexibility to participate.

CHALLENGES

While humanitarian surgical care is now considered a public health priority, it does not yet receive equal attention compared with human immunodeficiency virus/AIDS, malaria, or tuberculosis. Little attention has been paid to improving surgical care because to do so will require long-term investment to strengthen infrastructure and training of local staff, ideas which are less clear cut for donors compared with vertical disease interventions. However, global funding and international aid money are being increasingly invested in surgical care. In 2007, the World Health Organization launched the Safe Surgery Saves Lives Challenge¹¹ with the commitment to improve surgical-care safety worldwide. Funding is being provided to adapt the World Health Organization safe-surgery checklist to various resource-limited places.

As more young trainees commit to careers in humanitarian surgery, collaboration between residency directors and humanitarian organizations that provide surgical care in developing countries is needed. Until the value of these experiences is recognized by the ACGME, these relationships will be restricted. Furthermore, many organizations deliver care in unstable regions where resident training is considered inappropriate or training is for local surgical providers only. A balance is needed between immediate delivery of service and the training of Western future leaders in humanitarian surgery.

CONCLUSIONS

For me, a career in humanitarian surgery has been extremely rewarding. The unmet burden of surgical

disease is great, and much of the world's population has no access to safe surgical care. A great deal of work is needed to define the scope of the problem, improve infrastructure, train surgical providers, establish safety standards, and accurately measure outcomes. Political commitment and international funding are increasing, and a new generation of well-trained surgeons who are public health leaders dedicated to the humanitarian field is urgently needed.

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