

INTERNATIONAL ANESTHESIA: From Residency to Retirement, and From Humanitarian Aid to Disaster Relief

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The history of international anesthesia, as we know it, began after World War II when commercial air travel became facile, and it has been evolving ever since. The role of visiting and expatriate anesthesiologists in developing countries has been critical to service delivery and teaching, primarily because academic anesthesia in the developing world has lagged far behind its counterpart in developed countries. Since September 11, 2001, there has been an explosion of interest in global outreach, and the epidemiology of international health has evolved during this period to the point that the critical roles of surgery and anesthesia are increasingly understood and appreciated, even in the context of low-resource settings.

The historical lack of surgical services in developing countries has resulted in an enormous prevalence of surgical disease. For decades, few surgeons and even fewer anesthesiologists have been trained in low-income countries (LIs), and there has been little national government investment in surgical infrastructure. Diseases requiring elective surgery are particularly amenable to treatment from short-term visiting surgical teams and, therefore, this approach has been and remains common.



Recent advancements in global surgery and humanitarian service have expanded the role of short-term surgical missions to include more complex surgery, teaching and education. Anesthesiologists are required on every team to ensure safety, provide anesthesia and pain management and, increasingly, provide critical care. Education and training for local anesthesia providers are now importantly emphasized, as low-income countries are beginning to provide basic surgery at all community hospitals.



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As international anesthesia has evolved and advanced, the expectations placed on anesthesiologists practicing overseas have also changed. Low- and middle-income governments are more closely scrutinizing medical credentials, and international ethical standards are increasingly recognized and enforced.

Similarly, as the field of global surgery^{1,2} has grown, the expectation that surgical missions will provide more than just operative care has understandably evolved. Requirements for follow up, outcomes analysis and a complete package of related care has become an expectation. This includes not only safe perioperative care but also pain management and rehabilitation. These changes have significantly impacted the focus of international anesthesia.

It is essential that ASA promote ethical and responsible delivery of anesthesia in humanitarian and disaster settings and provide guidance to our residents, fellows and peers on the spectrum of responsibilities incumbent on caring for patients overseas.

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Many organizations have developed and promoted standards of care for short-term medical missions and disaster teams. Furthermore, in accordance with these standards, many now commonly transport essential medicines and safety monitors with their teams for these purposes. The ASA Committee on Global Humanitarian Outreach (GHO) recognizes the importance of safe, ethical, responsible clinical practice overseas and encourages ASA members to volunteer with organizations who practice accordingly.

In addition to supporting the provision of quality clinical care, the ASA GHO committee has historically and currently involved itself in training anesthesia providers in low-income countries and educating providers to provide safe anesthesia. These efforts have included, but not been limited to, the promotion of universal pulse oximetry and the routine use of pulse in the surgical safety checklist. The recent introduction of the ASA GHO Resident International Anesthesia Scholarship in Ethiopia provides U.S. anesthesia residents³ an opportunity to serve in a developing country under the direction of an ABA-certified anesthesiologist. In this way, trainees will be afforded the opportunity of learning the responsible role of humanitarian service.

This year, the World Health Assembly passed a resolution for strengthening essential surgery and safe anesthesia as part of Universal Health Coverage.⁴ This pivotal event has

opened the doors for the growth of anesthesia education, training and delivery in low- and middle-income countries, and it is likely that funding will follow. During the period of 2015-30, global surgery, anesthesia and pain management are expected to significantly advance, and international volunteers and academic exchange programs will play a role in this important process. Many opportunities are available for anesthesiologists committed to shepherding this process forward.

The humanitarian delivery of safe, responsible anesthesia is often not intuitive to anesthesiologists who have trained in high-tech environments. With this in mind, several courses exist to prepare anesthesiologists for austere environments. These include:

- The Anesthesia for Developing Countries Course, founded in 1981 in Oxford, now held in Kampala. Contact: events@ndcn.ox.ac.uk
- The Real World Anesthesia Course, held in Australia/New Zealand. Contact Dr. Chris Bowden: cbowden@phcn.vic.gov.au
- The Global Outreach Course (North America), the next course of which takes place in Boston. Contact: megan.chipp@cdha.nshealth.ca
- Developing World Anaesthesia (one-day course), U.K., Bristol and London. Contact: dwasouthwest@gmail.com
- Anesthésie de qualité pour les pays en développement: rêve ou réalité? (Quality anesthesia for developing countries: Dream or reality?). Contact: bernard.lepolain@uclouvain.be

Earlier this year at the ASA annual meeting, the Real World Anesthesia Workshop was held to provide a brief austere anesthesia educational experience and to develop interest in a full preparatory course in the future. Instructors and international experts in austere anesthesia participated in teaching this first-time course in San Diego. It is our hope that interest in this topic will continue and that future courses will be available on an annual basis.

References:

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4. Events World Health Assembly and Executive Board. World Health Organization website. www.who.int/surgery/en. Accessed October 9, 2015.