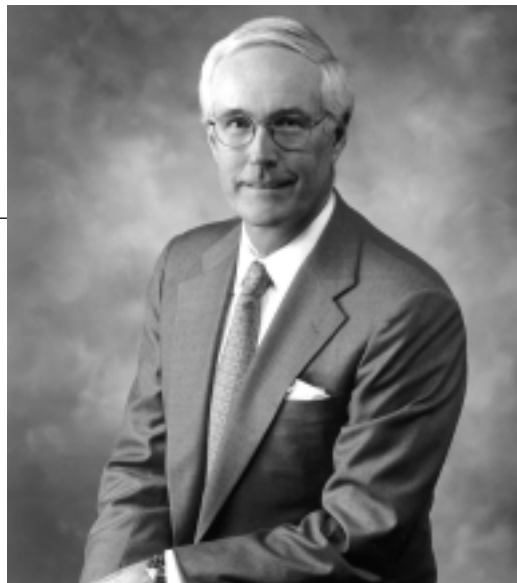


From my perspective



Earlier this year, I had the rare privilege of presenting the Digby Memorial Lecture during the Hong Kong Surgical Forum, and I addressed some of the issues related to the globalization of surgical care and the role that the American College of Surgeons can play in it. I thought it might be useful to share some of those comments with you.

The effects of globalization

At almost lightning speed and without geographic barriers, we can now conduct business and spread information. With great rapidity, nations have signed trade treaties, the World Trade Organization has developed, and globalization has spread astronomically. Trade and foreign asset ownership have reached new heights relative to world income, and the Internet has facilitated low-cost communication around the world.

However, as U.S. Counsel General to Hong Kong Michael Klosson said during a speech to the Hong Kong General Chamber of Commerce, “These same factors have also made us all more vulnerable to some of our oldest problems.” Among these difficulties, he notes, are terrorism, the spread of disease, cultural conflicts, disruption of the natural environment, and the growing gap between developed and developing lands.¹ C. Rollins Hanlon, MD, FACS, former Director of the College and a Consultant to me, said it well more than a quarter of a century ago during the opening ceremonies of the Third Congress of the Collegium Internationale Chirurgiae Digestivae: “The economic unity of our planet and the fearsome interdependence of have and have-not nations has suddenly become abundantly clear to all of us.”² At that time, Dr. Hanlon was referring to our dependence on other countries for fossil fuels.

In light of recent events, Dr. Hanlon’s words resonate more thunderously than ever. Places like North America and Hong Kong generally have been fortunate. We have strong free market economies and have enjoyed many of the fruits of globalization. Exactly how much good globalization holds for countries with limited

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resources remains debatable. Some experts say that globalization has led to increased financial stability for developing countries, such as China, Vietnam, and Uganda. This increased financial security has led to better nutrition, lower infant mortality, improved prenatal care, and enhanced health education.³ Others claim that globalization has outpaced the ability to grow and change within Eastern Europe, Africa, and Latin America. In fact, some people say these countries have actually fallen behind in terms of economic stability and the provision of social services. As a result, the overall health status of the people in those regions has suffered.⁴

Regardless of which view is more correct, globalization is likely to stay with us for some time, and it is our professional obligation as surgeons

to determine how we can best ensure that all countries—rich or poor, powerful or powerless—reap the medical benefits that can be experienced as a result of the progress being made.

Worldwide partnerships

I propose that the U.S. and other economically developed countries work together to overcome the challenges before us and to ensure that medicine does, in fact, lead to improved health care conditions for all humanity. Specifically, we could form alliances to advance globalized scientific research and to combat one of the world's most threatening problems—bioterrorism.

Partners in research

Many developed countries have been making concerted efforts to determine how best to improve quality of care and apply evidence-based medicine in providing surgical and other medical services to aging populations. In the U.S., the National Institutes of Health and the Agency for Healthcare Research and Quality (AHRQ) are looking to the medical and surgical communities to help them determine which treatments are most effective and lead to the best outcomes. Hence, about three years ago, the ACS established the American College of Surgeons Oncology Group (ACOSOG), which has been conducting clinical trials for treatment of a range of malignant neoplasms.

More recently, we established a Division of Research and Optimal Patient Care, which houses an Office of Evidence-Based Surgery. This office and division will be critically important in the future with regard to evaluating data. They will assist in determining best practices and the potential for clinical trials even beyond what we are currently accomplishing through ACOSOG. There are a multitude of other topics this division could effectively evaluate in the coming years. I would like to think that opportunities will arise in the not-too-distant future for the College and other international organizations to at least share the information that emerges from these studies and perhaps conduct cooperative studies on issues of mutual concern.

Partners against bioterrorism

Another issue that should be on the agendas of all countries at this time is terrorism. As Federal Reserve Chairman Alan Greenspan recently said, "Terrorism poses a challenge to the remarkable record of globalization.... If we allow terrorism to undermine our freedom of action, we could erase at least part of the palpable gains achieved by postwar globalization. It is incumbent on us not to allow that to happen."⁵

Our struggle against the horrors of international terrorism will most likely be long and arduous. As we cooperatively battle terrorism, we must remember that this type of warfare does not always involve kamikazes, bombs, grenades, and other typical combat weaponry. A more pernicious form of terrorism takes the form of strikes involving chemical and biological agents.

As I've mentioned before, the College is responding to the crisis. During the 2001 Clinical Congress, the Board of Governors and the Committee on Trauma issued two statements that reflect our willingness to contend with biologic and chemical terrorism (*Bulletin*, November 2001). As a result of the recommendations set forth in these documents, the College is considering the establishment of a network of related trauma agencies and the formation of alliances with federal, state, and local agencies.

We also could forge a bloc of international organizations to create a worldwide bioterrorism response system. The one positive side effect of the September 11 attacks on the U.S. has been that people of many backgrounds, races, cultures, and countries have united to fight terrorist networks. I anticipate that surgeons will similarly unite to defeat the potentially ravaging effects of bioterrorism.

Cross-cultural research

Ever since modern medicine really came into its own about 150 years ago, surgeons and other physicians have exchanged knowledge and skills to help overcome health care crises at home and abroad. I believe that now, too, we can be of most assistance to developing countries by stepping up scientific research. We must collect, analyze,



Dr. Russell (fifth from left) meets with the staff of the University of Hong Kong Medical Centre during his participation in the Hong Kong Surgical Forum. To the right of Dr. Russell is John Wong, MB, BS, FACS(Hon), professor and secretariat of the department of surgery at the medical center, Queen Mary Hospital. Dr. Wong invited Dr. Russell to present the Digby Memorial Lecture.

and exchange data in more global and systematic ways.⁶ The College operates two large data banks that focus on cancer and trauma. These repositories gather, sort, and disseminate U.S. hospital data for use by surgical scientists. We are looking at ways to make these databases more valuable to the research process. Perhaps we could work with international health groups, such as the World Health Organization, to develop a worldwide network of similar data banks. This type of research may lead to new medical advances for both developing countries and for developed countries with populations suffering from similar conditions.

Outreach

Another way physicians of all stripes historically have helped to resolve some of the world's plights is by working with religious and humanitarian organizations to bring medical and surgical care and training to underprivileged parts of the world. Many among us continue to provide this sort of

relief. Indeed, it is simply impossible to list all the examples of surgeons who have donated their time and skills to helping people in Africa, Asia, the Caribbean, Central and South America, and other regions with limited numbers of facilities and surgeons. These "Good Samaritans" have done much to improve the lives of many people who believed their conditions were hopeless. In return, they have often rediscovered the joy of surgery. They have had opportunities to perform many operations on patients who need and appreciate their help, and they have been able to do so largely without fear of lawsuits or the burdens of bureaucratic payment systems.

Unfortunately, few surgeons can devote more than a few weeks per year to caring for people overseas, especially when many at home often need our assistance. Hence, we must encourage more surgeons to get involved in outreach surgery. We must also find ways to ensure that surgeons who do take their skills into underserved areas leave a lasting legacy, making certain they



Guan Bee Ong, MB, BS, FACS(Hon), emeritus professor of surgery at the University of Hong Kong Medical Center (right), presents Dr. Russell with a medallion honoring his presentation of the Digby Memorial Lecture during the Winter 2002 Hong Kong Surgical Forum.

pass on their skills to the health care professionals currently practicing in underprivileged countries on a day-to-day basis.

Educational opportunities

While the provision of charitable care is a significant component in overcoming the devastating impact of operable disease in other countries, simply providing such services is not enough. I believe it is very important that we work to ensure that a more well-educated medical services workforce exists within developing countries.

The College has promoted international surgical education for many years. For example, we have traditionally offered International Guest Scholarships to competent young surgeons who have demonstrated strong interests in teaching and research. The scholarships, in the amount of \$10,000 each, provide scholars with an opportunity to visit clinical, teaching, and research institutions in North America and to attend and

participate fully in the American College of Surgeons' Clinical Congress. For the year 2002, we received a total of 78 complete applications from young surgeons all over the world, including a number of underserved countries, such as Bangladesh, Indonesia, Guatemala, and Nigeria.

Another educational program that reaches beyond the shores of North America is the Advanced Trauma Life Support® (ATLS®) program. The ATLS International Program was initiated in 1986, about eight years after we started offering the courses in the U.S. ATLS courses currently are presented in 45 countries, and approximately 350,000 physicians in countries ranging from England and Australia to Trinidad/Tobago have been trained in ATLS. ATLS serves as a prototype for the development of similar courses by other international societies for trauma training. Further, the techniques that have been used to develop and present the program could be applied to other types of care. Perhaps we could train physicians in countries that have shortages of surgeons to manage other conditions using this model.

Enhanced use of technology

Finally, we must encourage the proliferation of information and communications technology because today's high-powered computer technology can assist in improving worldwide health care on three levels—better education of health professionals, rapid exchange of ideas, and new delivery systems.

The College is doing much to enhance the ability of surgeons to obtain CME credits and to engage in lifelong learning through computerized at-home study. Some of the information exchanged at the annual Clinical Congress can now be accessed online, and individuals who want to test their understanding of clinical issues may do so through the *Journal of the American College of Surgeons*. Additionally, the College recently launched the eleventh version of the Surgical Education and Self-Assessment Program (SESAP 11), which also allows surgeons to expand and improve their knowledge and skills through in-home study.

Surgeons and surgical organizations also can use computers to more speedily disseminate information about public health issues and emergency advice. As I mentioned before, the College's Committee on Trauma is developing a plan for responding to terrorist attacks. We will publish this information on our Web site, and perhaps we could link institutions that have response plans, so they can exchange information during times of crisis. Additionally, public health organizations could post information about health problems in specific countries, and interested physicians and other practitioners could offer their expertise via the Internet.

And, of course, there is the field of telemedicine, with its ability to assist in delivering advanced surgical care to the farthest ends of the earth. Surgical organizations and professionals should contribute to this still largely untapped field, so that someday it will be possible for patients to undergo treatments that have just been developed continents away from their home.

Nonetheless, we must accept the reality that the world is now subject to what some people call "the digital divide." This term refers to the fact that only 5 percent of the world population has the financial and electronic resources to participate in the Internet and telecommunications revolution.⁶ We should work with computer companies and device manufacturers to help determine whether it is possible and worthwhile for surgeons to bring this technology to those who have been denied it for too long.

Conclusion

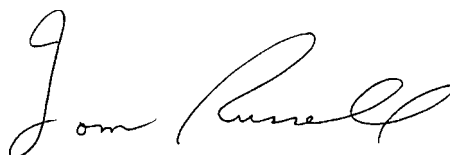
Accomplishing any of these tasks will be difficult and will require us to be ever mindful and tolerant of each country's uniqueness. As Dr. Hanlon said in his speech more than 25 years ago, "In the world of international affairs, scientific and otherwise, there are great divisive forces. There are factors of geography, of ethnic differences, of differences in temperament and tempo, and the considerable barrier of varied language."² We must accept and respect the fact that some cultures may oppose the performance of certain types of procedures and research

methods. Others may consider our efforts meddling and an interference with their entire way of life.

However, we have much to share, much to teach, and much to learn. I look forward to the American College of Surgeons becoming a truly international organization.

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If you have comments or suggestions about this or other issues, please send them to Dr. Russell at fmp@facs.org.