



Surgery and global health:

A mandate for training, research, and service— A faculty perspective from the UCSF

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Is it possible to justify introduction of a new, innovative, international component into the surgical curriculum at a time when vast—or “cataclysmic,” as some say—changes are occurring in American postgraduate surgical education? Is there value—educational, professional, or otherwise—in assigning an American surgical resident to an international training milieu in which clinical facilities generally lack ancillary support, modern equipment, and adequate staffing, given that U.S. programs adhere to strictly limited resident work hours, have access to sophisticated technology, practice early tracking to narrow subspecialties, and socialize residents as employees of large health care systems? Residents at the University of California, San Francisco (UCSF), have answered affirmatively, adamant in their demand for exposure to international health as a critical element of their training.

Senior surgery faculty members have focused their attention elsewhere: responding to the 80-hour workweek, evaluating the extent to which the six areas of competency are fulfilled within the framework of our training program, and addressing the problem of steadily declining revenues threatening the viability of academic programs; but our residents have independently identified areas and venues of training that will enhance their surgical education and, more importantly,

that they believe are essential to it. In particular, residents perceive the inevitability and existence of globalization and the resulting distressing inequity that exists between industrialized and developing nations. This polarization is particularly underscored by the disparate access to health care and consequently the tremendous economic burden and stress that surgical disease places on less modernized countries. Recognizing the potential multifaceted impact globalization has on residents’ surgical training and professional careers, our residents forged ahead and defined opportunities for mutually beneficial educational programs, specifically with the department of surgery at Makerere University in Uganda. Although initially reluctant to support such a program, our senior faculty members were finally convinced of its merits. We applaud our residents for their tenacity and credit them with being the architects and pioneers of a well-received pilot exchange program.

Why did our residents invest significant effort to develop this program and bring it to fruition? A simple explanation is that it was merely the creative élan inherent of youth and their fresh, unencumbered vision of the world. But, in fact, the explanation is far more complex. Our leaders in academic surgery may be guilty of selling this generation of surgical residents short: We have

repeatedly opined at national meetings and in publications of a generation of residents more concerned with improving their lifestyle than advancing medicine. Under mandate, we enforce work hour rules that extract residents from the operating room in the midst of complex procedures, with obvious consequence to time spent teaching and learning, and we have essentially eliminated them from direct patient care responsibility. The emphasis of residency instruction has strayed from teaching our trainees to go beyond parochial barriers to serve the sick and has been eclipsed by a honing of their ability to record work hours. But our residents are deeply motivated to participate and define the type of training they receive, transcend the rigidity of bureaucratic regulation, and embrace the practice of their profession with passion, and we applaud and support them in these efforts. Rather than only passively participating in lectures on professionalism, these young surgeons intend to live a life of professionalism.

How does an international rotation help trainees achieve their goals and strengthen our department's curriculum? As the effectiveness of a surgery program is now judged by qualitative success in six specific areas of competency, following is a brief, somewhat subjective, analysis of the potential impact an international program may have on these components.

Medical knowledge

An international experience will challenge surgical trainees with diseases rarely seen in the U.S., broadening their breadth of medical/surgical knowledge, actual experience, and ability to treat the more unfamiliar clinical problems. As communities in the U.S. and abroad reflect increasingly ethnically diverse populations, and in light of the exposure and mobility offered by recreational travel, the additional knowledge and skill trainees acquire will undoubtedly prove particularly useful.

Patient care

As sophisticated technology and equipment are often unavailable in developing countries, trainees will likely rely far more on the history and physical examination for diagnosis and management decisions. In effect, the focus of care shifts back to the patient as careful attention is given to what the



Dr. Farmer (center) with Makerere surgery department leaders Drs. Sam Kaggwa (left) and Mugisa Didace.

patient says and physically presents with, which the physician/surgeon must interpret. Trainees, thus, will nurture and improve the scope, flexibility, and creativity of their response to clinical problems as they explore alternate solutions to therapeutic and technical problems.

Professionalism

Perhaps there is no better way to develop and heighten professionalism than exposure and firsthand experience in underserved areas void of adequate facilities, advanced technology, and presence of sufficient numbers of health care workers. By participating in an international training program, trainees, in all likelihood, will provide

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care to an underserved population. By directly witnessing the day-to-day and lifelong hardship confronting underserved populations—coupled with the frustration of their own limitations in this setting—trainees will be imbued with an appreciation of the scope of the human condition. It will instill in them sincere compassion for those they serve, well after and beyond the context of this experience. At the same time, they will develop an inevitable admiration and respect for their colleagues who have chosen to dedicate their practices to serving these communities. If the values system of our society as a whole remains intact, then we would hope these experiences and their inherent message of respect, dignity, and service will emerge as components of the trainees' professional credo.

Interpersonal and communication skills

Cross-cultural communication can prove challenging. Language barriers and culturally specific perspectives and behaviors can contribute to misunderstandings and delay in delivery of patient care. Still, however difficult a learning curve this area may present, there is no doubt that training in a cross-cultural environment is likely to improve trainees' overall communication skills, including their ability to effectively work cooperatively. The effort to address, develop, and improve this area of competency would be well invested.

Practice-based learning and improvement

An international program admittedly would be unlikely to have a major effect on the practice-based learning and improvement competency, other than to provide exposure to vastly different practice modes and environments. Residents would be involved in practice-based learning and improvement regardless of the venue of training.

Systems practice

The addition of an international component to the curriculum will involve the residents directly with globalization. It may be that, as the impact of events on either a national or international level blurs boundaries, trainees will conclude that a philosophy of professional and personal distance and detachment is simply no longer a

realistic posture. Their participation and contributions will be concrete among an increasing interdependence of national and worldwide health systems and problems.

Finally, this program could serve as the blueprint from which other institutions model similar programs. In addition, as this international rotation matures, it may significantly expand basic science and clinical research, providing a gateway for collaborative opportunities between our institution, Makerere University, and other academic programs in Uganda and other regions in Africa. Certainly the potential to conduct public health and epidemiologic studies is a considerable benefit.

Convinced of this pilot program's promise of enhancing our residents' surgical training, our faculty looks forward with excitement and enthusiasm to collaboration with our colleagues at the Makerere University and our respective residents. Our goals are an improved educational experience for the residents of both institutions, closer academic and clinical ties between our two universities, and increased research opportunities aimed at relieving the burden of surgical diseases in the developing world. □

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