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General surgeons: More are needed

The glitter of surgical subspecialties has been luring students away from general surgery—a critical specialty if we are to provide the care our society needs and expects.

ABSTRACT: The specialty of general surgery has had difficulty attracting residents for training and most students who begin general surgery residency go on to subspecialties. This has led to a shortage of general surgeons, particularly in rural areas, where they are most needed. The answer may be to provide some training in community hospitals rather than in academic centres.

As a senior general surgeon I have watched over the years as surgery has been dissected into smaller and smaller subspecialties. When I was in training, there were only 9 main surgical divisions; now there are 19, and there would be more if the Royal College had not declared a moratorium on creating new subspecialties.

In my day, the object was to produce a surgeon who could cope with a variety of emergencies and urgent cases. We general surgery residents learned the basic procedures of the other surgical specialties and were expected to perform them when those specialists were unavailable—which at that time was in most parts of the country. We could perform a cesarean section, a hysterectomy, a D and C, and deal with an ectopic pregnancy. We could do burr holes, crack a chest, or clear a clogged artery; our scope ranged from the top of the head to the toenails. We could plate a fracture, nibble a prostate, and wire a broken jaw. We were able to operate on babies and the very old and all ages in between. The result was that we were versatile surgeons who could work almost anywhere and fix almost anything. This was precisely the sort of surgeon that smaller centres needed and still need now. Gradually, more and more subspecialties were carved off general surgery and soon we, the general surgeons working in big cities, lost many of the skills that we had been taught because we were increasingly being bypassed with the proliferation of new subspecialties. The subspecialties stopped training general surgery residents while general surgery became the training ground in basic skills for those about to enter a residency in a different field. General surgery began to suffer an identity crisis. There was talk of the need for a name change. “Oh, you are a general surgeon. I thought you were a specialist.”

As fewer residents opted for general surgery and the scarcity increased, the question arose: Do we still need general surgeons? Today half the general surgeons in Canada are over 55 years of age and will soon retire, which will leave the 20% of Canadians living outside major cities, many in rural and northern towns, without an essential service.[1,2] It is impractical for this

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population to depend on a plethora of faraway subspecialty surgeons.[3] Apart from emergency surgical work, which must be done immediately, a wide range of less emergent and elective surgical procedures are well within the capabilities of a properly trained general surgeon. Also, if these surgeons did not exist, many patients would have to be transferred to a major centre at considerable cost to the system and inconvenience to the patients.[4] It would set two standards of health care for Canadians, which we would rightly reject. Clearly this cannot be allowed to happen.

Why are so few students considering a career in general surgery?[5] There are several reasons. First, although the fact of this scarcity is generally known, our medical schools have not grasped the severity of the situation and do not appear to have any concrete plans to deal with it; the heads of surgical departments are seldom if ever general surgeons and they naturally promote the subspecialties that might bring national and international renown to their departments. Furthermore, the university encourages this approach, since kudos, and in part income, depend on research and publications, and surgical subspecialties as opposed to general surgery are more likely to provide them. In short, the medical schools have little incentive to encourage general surgery. In addition, medical students inclined to a surgical career may get the impression that a generalist path is somehow of lesser merit once they are exposed to the glitter of the surgical subspecialties.

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Then there is lifestyle—an increasingly important consideration for young surgeons, and rightly so.[6] Because there is a shortage of general surgeons, the call schedule, particularly in underserviced rural and northern areas, is more onerous than that of a subspecialist in a large centre. This problem is self-perpetuating—the fewer general surgeons we train, the worse the shortage becomes, and the more on-call coverage will be needed for general surgeons, making future students even less inclined to consider general surgery as a career option. This is not helped by the fact that the fee schedule for general surgery is not as attractive as the schedule for surgical subspecialties in larger centres.

If we need general surgeons, where best to train them? The life and scope of a general surgeon in the tertiary care teaching hospital is rather different from that of a general surgeon in the community, and although many excellent mentors are available in these teaching hospitals, it would perhaps be better if the general surgery residents had much of their training in the community, in rural or northern settings. It is well known that students and residents receiving training in an area often remain when the training is complete, and this could be an added benefit for our neglected regions.

A few sites still exist with enough general surgeons to develop training and mentoring programs, and it is important that these surgeons be engaged to reverse the downward trend in general surgery. The University of Northern British Columbia, in partnership with UBC, already trains general surgery residents and should, along with other sites, be given every incentive to continue and expand its programs. The university medical school must understand that training surgical residents, depending on their seniority, will require more operating room time and may reduce the teaching surgeon's output by up to 15%; this will of course increase waiting lists for elective cases and erode the income of the mentoring surgeons, both with obvious financial implications that cannot be ignored.

On a hopeful note, there is some evidence that more would-be surgeons are considering general surgery. Many of the subspecialty surgical areas are filling up and it is increasingly hard for new trainees to find jobs exactly where they would like to work. It will be some time before this happens in general surgery, and provided that this

trend continues we may look forward to community, rural, and northern positions being filled with enough general surgeons not only to provide a vital and professionally rewarding service but to allow a satisfactory lifestyle.[7,8]

The future of general surgery, a critical specialty if we are to provide the care our society needs and expects, depends on the medical schools and their surgical departments making it crystal clear to students that school officials and department heads consider general surgery every bit as prestigious and as important to society as any of the surgical subspecialties. At the same time, they must ensure there are sufficient funds to support the mentoring programs in those communities able to provide training.[9]

It might be added that many young graduates are interested in offering their services to countries less fortunate than ours, either before settling in a practice or from time to time while in practice. General surgery skills are more portable than many and in this regard the world is the general surgeon's oyster—another attraction to considering this career option.

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Competing interests

None declared.

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