

### **The role of subspecialization in emergency medicine: a rebuttal**

*To the Editor:* In the September 2005 issue of *CJEM*, a Commentary by Sinclair on the role of subspecialization in emergency medicine (EM) outlines the historical development of our specialty and champions the maintenance of our generalist skills.<sup>1</sup> We take exception, however, to the bold headline that subspecialization in EM is the “wrong direction” and to the conclusion that subspecialists “will play a limited role in the future of [emergency medicine].” These statements are misleading, their message inappropriate, and their foundations logically flawed.

Sinclair’s primary concern seems to be that the proud generalist tradition of EM might suffer the same fate as internal medicine and general surgery. However, specialization and subsequent subspecialization of labour is a fundamental force behind human progress since time immemorial. Indeed, today’s subspecialty may be tomorrow’s specialty. Cardiology and orthopedics were once subspecialties of internal medicine and surgery, and their gestation decried by the generalists. EM itself is a specialty created by generalists with a passion for working in the emergency department. For many of the reasons Sinclair concedes, physicians concentrating their practice and intellectual inquiry to a specific field of interest is both inevitable and important to advancing knowledge, educating new physicians, advocating for improvement and ultimately better patient care and outcomes.

EM, with its flexible scheduling, unpredictable case mix, and mobile workforce, is a particularly attractive core specialty for individuals seeking new challenges, including subspecial-

ization. Two relevant examples are the pages of this Journal and the speakers’ list for the 2006 International Conference in Emergency Medicine in Halifax, which both demonstrate the recent contributions of EM specialists with additional expertise in a range of fields. These domains include administration, medical education, public health and forensics, in addition to those listed in Sinclair’s Commentary. We doubt that Sinclair feels such talented individuals and their trainees “will play a limited role” in our future.

Subspecialists have much to offer. They are a resource, sharing their knowledge and contributing to ongoing discovery. Many act as consultants to colleagues from other specialties, reversing the usual roles and reminding them that emergency physicians really are good at everything, even if they are unwilling to do the specialists’ work for them.

In contrast to many other disciplines, however, subspecialized emergency physicians continue to function as generalists. EM, by its very nature, precludes scheduling only patients within a given domain of expertise. This defining feature provides a powerful deterrent to the erosion of core specialty skills. While pediatric EM in large urban centres serves as the singular exception to this truism, most would consider even this subspecialty to be rather generalist-oriented. Our specialty will continue to value those who can deftly manage a high-acuity, high-volume shift. Training programs will continue to emphasize exposure to general EM. We cannot contemplate returning to a system where the triage nurse pages a cardiologist to see the next chest pain patient. We see no sign of fragmentation and devolution of our specialty. Instead, we see a mature, dynamic and evolving specialty that at-

tracts inquisitive and energetic physicians, some of whom will train beyond their core specialty. We are all Emergency Medicine.

Indeed, one might wonder if a bigger threat is too much generalism, and the ongoing dilution of the cases that drew us to EM in the first place. As trauma teams and stroke teams nestle into our resuscitation rooms and patients with acute myocardial infarction bypass us on their way to the cath lab, we spend more of our time providing primary care, arranging urgent nursing home placements and providing ongoing specialist care for patients prematurely discharged home. The solution is not to fear being the last generalists left minding the shop, but to advocate for the interests of our specialty and our patients in a changing world. While many factors have contributed to the shortage of generalist physicians, this is not the inevitable consequence of subspecialization, nor should it be used to restrict the natural growth of our specialty and its practitioners.

Reading Sinclair’s Commentary, one is reminded of King Canute, arms held high, commanding the tide to stop rising. Rather than opposing the inevitable evolution of our specialty, we need to encourage progress while promoting and maintaining our core skill set, and while advocating for timely access to appropriately trained and available physicians in all disciplines.

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**Reference**

1. Sinclair D. Subspecialization in emergency medicine: Where do we go from here? [editorial]. *Can J Emerg Med* 2005;7(5):344-6.

**[The author responds:]**

I thank Drs. Sivilotti and Howes for taking the time to write their thoughtful letter on my Commentary on subspecialization in EM.<sup>1</sup>

I feel that their comments support my Commentary — they clearly state that the essence of emergency practice is the skill to “defly manage a high acuity, high volume shift.” They also state that “subspecialized emergency physicians continue to function as generalists.”

It is the value of generalist thinking and approach that we must continue to embrace as a specialty. Initially, subspecialists in other fields of medicine also functioned as generalists, but it just became too easy to restrict practice. The emerging literature on the hidden curriculum clearly shows how we devalue generalism in the house of medicine. We can stop the tide from rising!

**Doug Sinclair [a.k.a. King Canute]**

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**Reference**

1. Sinclair D. Subspecialization in emergency medicine: Where do we go from here? [editorial]. *Can J Emerg Med* 2005;7(5):344-6.

**Emergency Medicine  
is a SPECIALTY. Let's make  
it that, and not dilute it  
in order to be PC**

*To the Editor:* I read the Commentary by Adam Lund<sup>1</sup> in the January 2006 issue of *CJEM* with interest, but am puzzled by his closing remarks. Is he im-

plying that there is no distinction between service providers in the ED?

I would agree that subspecialization is something that might not best serve the interests of the EM community at the present time, as it will further splinter an already splintered area of medicine. Now is the time for setting up national standards for training, aiming toward minimum requirement for physicians wanting to practise in EDs, building on the number of certified emergency physicians (whether FR CPC or CCFP-EM), and ultimately aiming for consolidating EM as the SPECIALTY that it is.

I don't believe that EM is best practised by the “available physician.” Completing an EM residency obviously enables one to practise at a different level than someone with no formal training. Even the 1-year residency offered by the CCFP enhances the skill and knowledge level of the physicians to the point that they mostly narrow their practice of medicine to EM. I don't believe that there is a substitute for appropriate supervised training, such as a residency provides. We as a specialty should strive for the ultimate goal of a unified qualification/certification process.

Until there is a shift in the current paradigm, emergency physicians will continue to meet opposition and a lack of recognition from the “established” specialties due to the enormous variability in performance level. And you cannot blame them, since they interface with such a wide variety of competencies — it is no wonder they don't know what a “specialist” in EM is (even though the “specialty” has existed for more than 30 years).

What I would like to see is a set of criteria set forth by CAEP as to what an emergency physician is, and perhaps supplement this by awarding a “FCAEP” to suitable individuals (similar to the FCFP awarded by the College

of Family Physicians of Canada). This would be a start to a process that would hopefully, eventually lead to ONE qualification, ONE type of residency training, and a UNIFIED body of physicians able to practise the “Model of the Clinical Practice of Emergency Medicine”.

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**Reference**

1. Lund A. I AM Emergency Medicine [letter]. *Can J Emerg Med* 2006;8(1):4-5.

**[The author responds:]**

Thanks to Dr. Bothma for taking the time to respond to my Letter.<sup>1</sup> I think that this is an important dialogue for our EM community to be having.

Variability is the norm in all areas of medicine. Depending on where one practises, the scope of practice and the sustained range of competence changes. General surgeons practising in more rural areas would be arguably wider in their scope of practice than colleagues in tertiary centres, but less comfortable with certain high acuity/low frequency problems. As such, tertiary groups of surgeons advertise for and attract physicians with more focused/subspecialized general surgery credentials (subspecialty fellowships, research training, etc.) than those sought in smaller communities (Dr. Manoj Raval, Fellowship-trained general surgeon: personal communication, 2006). Not all surgeons are the same, yet all are regarded as specialists.

The practice of EM is arguably even more variable. The emergency needs of communities and hospitals of all sizes call for a broad range of individuals with different skill sets to meet those needs. I feel that it is more productive for us to embrace the whole practice of EM which is, and always will be, prac-

tised in a variety of settings. To exclude those who practise “less than” tertiary care medicine from our community is self-defeating. I believe that we will gain much more strength as a larger, more unified community.

I would encourage CAEP and our EM community at large to engage in discussions about consolidated training, and wouldn't argue against “fellowships” and other recognitions of distinction in training. I believe that our EM colleagues from smaller centres will continue to be interested in educational opportunities and research initiatives designed by those with more training and with experience in high acuity/high volume centres. I propose that we look at a broader educational strategy to support our whole EM community rather than attempt to define a one-size-fits-all definition of an emergency physician that cleaves the majority from our ranks.

**Adam Lund, MD**

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**Reference**

1. Lund A. I AM Emergency Medicine [letter]. *Can J Emerg Med* 2006;8(1):4-5.

**Nalidixic acid overdose and metabolic acidosis**

*To the editor:* A 15-year-old boy was recently brought to our emergency centre with lethargy and agitation after ingesting about 60 tablets of nalidixic acid (NA) in a suicide attempt. Shortly after arriving, he suffered a tonic-clonic seizure requiring intravenous diazepam. In addition to altered mentation, he was tachypneic with a respiratory rate of 40 beats/min. Cardiovascular, gastrointestinal and neurologic examinations were normal, and blood glucose was 100 mg/dL. Arterial

blood gas analysis revealed a pH of 7.31,  $PCO_2$  of 11.3,  $[HCO_3]$  of 5.7,  $PO_2$  of 98.7 and oxygen saturation of 96%. Because of the profound metabolic acidosis, he was treated with 44 mEq of sodium bicarbonate ( $NaHCO_3$ ). With supportive care, the boy recovered uneventfully after 12 hours.

Nalidixic acid poisoning may cause altered mentation, psychosis, convulsions and, rarely, metabolic acidosis.<sup>1-4</sup> Quinolones inhibit GABA (gamma-aminobutyric acid) receptors in the human central nervous system, potentially precipitating seizures.<sup>2</sup> Nalidixic acid interferes with lactate metabolism and may cause acidosis in predisposed patients,<sup>3,4</sup> although, in this case, the acidosis may have been in part due to seizure and agitation. Sodium bicarbonate was administered intravenously because of concerns about acidosis-related myocardial and central nervous system dysfunction,<sup>5</sup> but it is unclear whether this therapy was beneficial. Nalidixic acid poisoning is an uncommon problem, but should be considered in the differential diagnosis of patients presenting with unexplained metabolic acidosis and seizures. NA should not be prescribed in patients who have a propensity to develop acidosis, particularly patients with poor perfusion, sepsis or liver disease.

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1. Christ W, Lehnert Ulbrich B. Specific toxicology aspects of the quinolones. *Rev Infet Dis* 1988; 10 (suppl 1):141-6.  
2. Tsujij A, Sato H, Kume Y, et al. Inhibitory effects of quinolone antibacteriocidal agents on GABA binding to receptors sites in rat brain membranes. *Antimicrob Agents Chemother*

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4. Sharma S. Lactic acidosis. Available: [www.emedicine.com/med/topic1253.htm](http://www.emedicine.com/med/topic1253.htm) (accessed 9 Feb 2006).  
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**Public understanding of prolonged ED waiting times**

*To the editor:* Physicians and health care leaders struggle with the growing problem of emergency department (ED) waiting times,<sup>1</sup> but little is known about the public understanding of these waits. We conducted a waiting room survey to assess public perceptions regarding the causes of prolonged ED waiting times at Lions Gate Hospital, a 240-bed community hospital and trauma centre in North Vancouver, BC, that has 45 000 ED visits per annum.

A trained surveyor (K.S.) invited patients and families in the ED waiting room to respond to the question, “What do you feel is most responsible for the long wait to be treated in the ED?” There were a total of 201 responses from patients who waited between 0.5 to 12.5 hours. The most common response was “Not enough doctors working” ( $n = 61$ ; 30%). Other responses included: “Too few hospital beds, resulting in a back-up of admitted patients in the ED” ( $n = 34$ ; 17%); “Not enough nurses working” ( $n = 30$ ; 15%); “The ED is too small” ( $n = 26$ ; 13%); “Too many people come to the ED for minor problems” ( $n = 24$ ; 12%); “the ED is not operating efficiently” ( $n = 22$ ; 11%); and “Other” ( $n = 4$ ; 2%).

The causes of prolonged ED waiting times have been well described, and the Joint Position Statement by the Canadian Association of Emergency Physicians and the National Emergency

Nurses Affiliation on overcrowding identifies the core issue as poor access to inpatient hospital beds,<sup>2,3</sup> yet only 17% of respondents cited this as a cause. This suggests that an overwhelming majority of patients and their families are not aware of the true causes of prolonged ED waits. As we develop and promote solutions to ED overcrowding, it would seem prudent to include measures that will increase public education and awareness.

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1. Two thirds (67%) of Canadians say that they or a family member waited longer than reasonable for access to health care services. Ipsos Reid Poll, 2004 Feb 25.
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