

Five crises in pain management

I believe that there are five preeminent crises in pain management today: 1) the lack of evidence for the outcomes of most of the things providers do for patients, 2) the inadequate education of primary care providers about pain and how to treat it, 3) the largely unknown value of opioid treatment for patients with chronic non malignant pain, 4) funding for the providers of pain management, and 5) access to multidisciplinary care. All of these issues may loom larger in the United States than elsewhere, but they are not unique to this country. Yes, there are other issues, but these seem to me to be the most important.

Proving that what we do has favorable outcomes for patients is certainly paramount, but we need to balance population-based Studies with what we know about individual variation in response to treatment and the associated risks. Furthermore, evidence-based medicine does not address the needs that patients have for diagnosis, prognosis, guidance, and sympathy that have always been, and should remain, part of the provision of health care (1). Tyranny of data must be tempered by clinical judgment. This problem is compounded by the recommendations of the US Food and Drug Administration (FDA) and the European Medicines Agency (EMA) that research for prospective new drugs should be targeted at diagnosis, yet the real focus should be on mechanisms of pain. Randomized clinical trials are not the only reliable source of information about treatment utility; they are rarely useful for the assessment of long-term effects, either good or bad. Observational studies do have something to offer. There is going to be tension between those who fund health care and would like to use population-based studies to determine what will be funded, and those who actually provide care to patients and recognize that almost no one is average. If we consider the individual's rights to be preeminent, how do we deny someone the chance to have a favourable response to a treatment that most people would not benefit from? Physicians have always placed their patients foremost. Who is going to fund research on the treatment outcomes that we advocate for, especially treatments that are not drug or device based? Since the mandate of the National Institutes of Health (NIH) is to reduce the burden of disease, and since chronic pain produces more disability than the sum of cancer, heart disease, AIDS, and stroke, should we not look to the NIH to fund more pain treatment outcome trials? (2). How do we get clinicians to have their patients participate in large trials that are necessary to determine population-based outcomes? How do we get all providers to record outcomes of their patients for such studies? Large national databases have been established in some countries. All patients evaluated and treated in any

rehabilitation program in Sweden (including pain programs) are entered into a national register with demographics, diagnoses, and outcomes. In Quebec, all patients coming to tertiary care pain clinics are also entered into a database with a minimal 6-month follow up. These records include a structured physical examination, patient-reported outcomes, past treatments, new treatments, medications, and demographics. In Norway, all prescriptions are entered into a national database, which is used for research on opioid and benzodiazepine use and abuse. One way to get such outcomes and demographic data is to make physician reimbursement dependent not just upon the receipt of an operative report or clinic note but also upon follow-up data 6 and 12 months after treatment. All patients should be part of such studies, not just a small number selected for a randomized controlled trial. Why should any health care system fund care that has no known benefit to the patients? For such widespread data collection, we need to have a standardized database for all clinical outcomes studies so that meaningful comparisons can be made (3). We will also have to establish criteria for applying a diagnosis that are not solely based upon the procedure that the physician wishes to perform.

There are woeful inadequacies in pain education for medical students and advanced trainees (4-10). This short fall has been noted for many years, and it remains, at least in the United States, the major cause of poor pain treatment. In Europe, this problem has begun to be addressed. In Nordic countries (Sweden, Denmark, Finland, Norway and Iceland), doctors who have completed clinical specialty training can enroll in a pain course. The Danish government will not allow any Danish doctor to practice as a pain doctor without having completed this course. Portugal also has such a course with a similar curriculum.

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All physicians who deal with clinical illnesses will be confronted with chronic pain patients. For this reason, no one should receive a medical degree without learning core knowledge about both acute and chronic pain, including cancer pain and nonmalignant pain. There are hospitals that require all interns to spend a minimum of 1 week in the pain clinic. Some pain clinics also get residents for a minimum of 2 weeks from almost every specialty, but this practice has not yet become compulsory. The huge number of pain patients mandates that the overwhelming majority of health care for patients with chronic pain must come from primary care providers. Pain specialists can see only those who have special needs for advanced forms of therapy. The crisis in opioid therapy discussed below is primarily due to the prescribing traits of primary care practitioners, not pain specialists. The problem involves not only how physicians are educated, but also what types of people are selected to become physicians. Those who have a biomedical fixation are not likely to deal successfully with chronic pain patients. It seems to me that other health care disciplines have advanced further than medicine in this arena. Medical school curricula are the last vestige of the feudal system in the modern era; change will not be an easy task. The length of the educational process is fixed, and the hours available for teaching are not going to increase. What can be deleted from the existing curriculum to make room for pain? Since most of the faculty of most medical schools are ignorant of pain, how do we get them to replace existing curricular content with pain information? The prevalence of chronic pain and the inadequacies of our current graduates must be used to agitate for change. I cannot say that I am optimistic about this

process, but we must do better by our students. A few North American schools of medicine have successfully addressed this issue and have shared their programs in publications (11,12).

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Pain management is plagued by factionalism. There is no organization that speaks for all of us, and there are no agreed-upon educational or certifying steps; many practitioners function within silos, unaware of what others are learning, saying, or doing. Competing accreditation organizations for individuals and professional societies produce confusion for the public and for organized medicine. Different agendas underlie the efforts of the myriad of professional organizations and publications that claim to represent pain medicine. Guidelines are promulgated that are said to be evidence-based, but often reflect what the members of the guideline-writing committee do for a living or where they stand on a political spectrum, particularly in reference to opioids (13,14). All guidelines reflect the values and preferences of those who write them; they are not really scientific, even though they are said to be based on “evidence.” Perhaps we need a David to consolidate the pain professionals and lead us to victory over the Philistines who surround us.

Health care has never been based exclusively upon scientific evidence; indeed, acquisition of such evidence has been relatively novel in the history of medicine, and it is only recently that providers have had the opportunity to apply treatments that have scientifically demonstrated efficacy. Nowhere is this situation more clearly demonstrated than in the use of opioids to treat chronic pain. The first principle here was that acute and chronic pain were very different phenomena; this insight was one of Bonica’s most important early contributions. His pain clinic was founded at the University of Washington in 1960, and within a decade its clinicians were swamped with patients who complained of chronic pain yet were taking significant doses of multiple opioids (and other drugs) prescribed by multiple physicians who had no idea what their patients were actually consuming. From this clinical experience, we developed the mantra that it was not wise to treat chronic pain patients with opioids, and we developed treatment strategies to get these patients off their drugs (using the “pain cocktail” approach) and rehabilitate them (15). It did not enter our minds that there could be significant numbers of chronic pain patients who were successfully managed with opioids, because if there were any, we almost never saw them.

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In the mid-1980s, several papers were written that challenged the opprobrium surrounding opioids in the management of chronic pain patients (16). The authors appeared to generalize experiences from the treatment of cancer pain patients and reported on a small number of chronic noncancer pain patients who were carefully followed for limited times and “appeared” to do well, meaning that their reports of pain levels were improved but no functional changes were noted. Aberrant, drug-seeking behavior patterns were not observed. These publications fed into the concept that anyone who said “ouch” was entitled to receive opioids in whatever dose they seemed to need. Soon thereafter, the marketing of OxyContin® and the implication that opioids were good for all chronic pain patients led the charge in widespread use of opioids for chronic pain patients in the United States. Opioid

prescriptions written by primary care practitioners and pain specialists soared, diversion became a very large problem, and deaths and emergency room visits ascribed to opioids escalated. The inevitable pendulum swing is now occurring, and there is much more concern about opioids for chronic pain patients. Side effects and risks of improper use are now hotly debated. The fundamental question about efficacy of opioids for chronic pain patients has been lost in the political, economic, and ethical arguments. Scientifically valid data about treatment outcomes are sparse. Pain management in the United States has been badly hurt by this debacle. Similar things have happened in Canada, where the politicians are trying to enforce a special license for prescribing opioids, with mandatory teaching as a prerequisite. In Europe, opioid prescribing has not had such extreme highs and lows; problems with opioid prescriptions for nonmalignant pain were identified earlier than in the United States, and remedial actions were implemented in many countries (17). In many countries and in many U.S. states, the rational use of opioids is now impeded by regulatory agencies and insurers in the attempt to control excessive prescriptions without regard for what is best for a particular patient. Another result of the opioids-for-all movement has been the "pill mills" that seem to be most prevalent in the southeastern United States. Yet another is the expectation by chronic pain patients that they are entitled to receive opioids whenever they hurt. This crisis is primarily due to lack of evidence for the results of chronic opioid administration. Although the treatment of chronic pain may be a basic human right, that does not mean that all patients are entitled to large doses of opioids (18). On the other hand, what is legal to put in one's mouth has never been determined by medical science; it has always been a social convention. The ethical resolution of this crisis is only to be found in research on this topic, not from consensus panels or legislative mandates. Who is going to fund this research?

The fundamental principle of capitalism is that money motivates behavior. This tenet certainly applies to health care providers; the way the United States favors the reimbursement of procedures over cognitive activities has led to the proliferation of interventional pain specialists and enormous increases in injections and operations for pain in the past 20 years, as well as a reduction in the number of comprehensive multidisciplinary pain clinics. This change has occurred in spite of very little evidence that interventional procedures are beneficial for most chronic pain patients. In countries that have centralized allocation of health care resources, this phenomenon has been controlled to a much larger degree. No matter how health care is financed, pain management must be included within the pay line. Concerted action is needed on the part of the pain world to influence those who will make such funding decisions; whatever happens to pain management will be part of the grand scheme for the provision of health care. We must be vigilant, for we could be completely omitted from what will be funded. We need to create public demand for our services and secure legislative recognition for the importance of pain management. We need to develop champions in the political arena who will work on behalf of providers and our patients to facilitate the delivery of first-class pain management. This usually means access to multidisciplinary diagnosis and management. Access is compromised both by a shortage of such clinics and by the long patient waiting lists. In Sweden, the government body responsible for health care recently put forth a proposal that every county should have a board to which difficult pain problems would be sent for review. The problems would be evaluated, and if it was deemed necessary, the patients would then be sent for evaluation and treatment to a team composed of a physician, a psychologist, and a physiotherapist. Two Swedish counties have begun this process.

We need to create public demand for our services and secure legislative recognition for the importance of pain management

Eleven years ago I contributed an essay to *Pain: Clinical Updates* and outlined five issues that deserved our attention: defining the mission of pain management, producing outcomes data, showing the public why we matter, figuring out how to get paid for what we need to do, and learning how to continue to provide sympathetic care to our patients. Although some progress has been made on each of these points, it is not enough to make me feel comfortable about our specialty. Of all these issues, I believe that the one that is most critical is the education of health care providers. Pain physicians in academic medicine are the only ones who will address this shortfall, and we must make progress in this area. This endeavor should be independent of the political and economic issues that have enveloped medicine and over which we have little control. We need to redouble our efforts to provide better education for our students and trainees; no one else will do it if we default. And we need to do so with evidence-based clinical data to add to the vastly expanded basic science knowledge of neuroanatomy, neurochemistry, and neuropharmacology. If we fail, I look forward apprehensively to a legislatively mandated curriculum for medical schools: who knows what will be taught then? To be at the whim of legislators or government administrators will, I fear, be the death knell for both scientific and humanistic pain medicine. Health care providers need to care about patients and not see them as customers. The good for the individual patient must take precedence over costs and health system needs. The essence of health care is caring for the patient.

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