

# Pain Medicine Versus Pain Management: Ethical Dilemmas Created by Contemporary Medicine and Business

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**Abstract:** The world of health care and the world of business have fundamentally different ethical standards. In the past decades, business principles have progressively invaded medical territories, leading to often unanticipated consequences for both patients and providers. Multidisciplinary pain management has been shown to be more effective than all other forms of health care for chronic pain patients; yet, fewer and fewer multidisciplinary pain management facilities are available in the United States. The amazing increase in interventional procedures and opioid prescriptions has not led to a lessening of the burden of chronic pain patients. Ethical dilemmas abound in the treatment of chronic pain patients: many are not even thought about by providers, administrators, insurance companies, or patients. We call for increased pain educational experiences for all types of health care providers and the separation of business concepts from pain-related health care.

**Key Words:** ethics, pain, business, multidisciplinary pain management, pain education

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This article addresses the ethical conflicts between providing coordinated multidisciplinary care (doing the right thing), and providing exclusively technical services for chronic pain patients with the assumption that fixing the broken parts will solve their problems (usually the wrong thing). It will also touch on the ethical issues of just providing little or no health care to chronic pain sufferers. Unrelieved pain prevents the enjoyment of all human activities and devalues the life of the sufferer. Concern about the relief from pain is a reflection of our innate need for fairness and compassion when confronting suffering. Although the recent thrust of legal matters about pain in the United States has been mainly related to its overtreatment with opioids, there is beginning evidence that untreated pain in and of itself can be recognized as an injury in a court of law (<http://www.community.compassionandchoices.org/document.doc?id=77>). Certainly, monetary damages do not undo the horrors of unrelieved pain, but provider behavior may be influenced by litigation on both sides of the treat or nontreat equation. Pain management is loaded with ethical and attitudinal dimensions greater than most medical endeavors.<sup>1</sup> Yet, the ethical issues in the management of

chronic pain patients are not wholly dissimilar from those of medicine in general.

Two viewpoints have been commonly expressed in the United States about developments in health care: first, physicians often feel that their ability to deliver unimpeachable and often complex health care has been compromised, and, second, physicians lack the ability to manage health care in a socially responsible manner and therefore control should be removed from them. Both viewpoints often seem to be true. In the United States, most physicians are incentivized by the economics of health care to offer multiple, unrelated services without considering the documentation of outcomes. Capitalism has overtaken the traditional mores of health care; profits are the bottom line, not efficacy or humanity of care. Despite the talk about evidence-based medicine (EBM), the primary driving force behind changes in health care has become economics. Yet, financial incentives are certainly not as durable as ethical standards for medicine, including pain management. Ethics have some permanence and historical relevance; finances are far more fickle and do not establish a reliable standard for health care of any type, especially pain management. The practice of medicine has always been based upon a covenant of trust, with both patients and society. Although almost everyone does lip service to the concept of evidence-based practice, in reality this goal currently is far from achievable, even under the best of conditions. EBM for pain cannot now be implemented because there has been so little quality research on pain management.

The moral obligation to alleviate pain and suffering often has been overlooked. Even in countries with more rational health care systems than the United States, what patients may need is not necessarily what physicians offer for chronic pain treatment. We will, therefore, explore the tensions between our traditional medical ethics of duty (medical deontology) and our pursuit of happiness (eudaimonic consequentialism) as seen in the free market; we propose some solutions for resolving the debates that surround the management of chronic pain patients. At 1 level, this can be seen as the conflict between the biomedical and the biopsychosocial models of illness, and this theme pervades the discussion of many of the issues in the ethics of care for patients who suffer from chronic pain. There are inconsistencies between the goals of medicine and the goals of business. Since business has largely taken over medicine in the United States, business ethics, rather than medical ethics now prevail in the health care in our country. Chronic pain management has not done well in such an environment. The economic model of behavior has supplanted the medical model; chronic pain patients suffer from this more than most other patient groups. Does this mean that the government must take over the provision of health care to preserve pain management for those who suffer from chronic pain? Who gets to define what will be

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included in chronic pain management in the next revision of health care in this country?

## HISTORICAL BACKGROUND

Health care is a social convention; it is not now and has never been based upon evidence for outcomes. Rather, it has evolved, along with other aspects of culture, from earlier attempts to solve the problems of human life and death. Pain, both acute and chronic, has been part of the human experience as long as our species has existed. Methods used to treat pain have come and gone, commensurate with the evolution of human cultures and technology. In the western world, the reductionist model of disease flourished in the 19th and 20th centuries, leading to a biomedical concept of disease as a broken part that could be fixed by the application of appropriate technology. Although this strategy has worked fairly well with the treatment of acute pain and acute illness in general, it has clearly not been successful in dealing with chronic pain and chronic diseases. This matter was first clearly addressed by John J. Bonica,<sup>2</sup> who strongly advocated the need for comprehensive assessment and treatment of patients with pain, both acute and chronic. He railed against the prevalent idea of the mid-20th century that pain was a byproduct of disease and that if the disease was successfully treated, the pain would evaporate. His idea that a team of physicians would be better for the patient than a solo practitioner was novel, and not well received in many quarters.

When Bonica came to the University of Washington in 1960, he launched a multidisciplinary pain clinic (MPC) that included not only physicians but also nurses, physical therapists, occupational therapists, and psychologists.<sup>3</sup> The latter group had begun to show clinical interests in the treatment of pain patients in the 1960s, but it was Wilbert Fordyce<sup>4</sup> who first recognized pain behaviors as a potential subject for health care. By 1980, pure behaviorism had evolved into cognitive-behavioral therapy and this became an integral component in the treatment of chronic pain patients, along with medication management, physical treatments, vocational rehabilitation, and appropriate interventions with needle or knife. The 1980s and 1990s saw the flourishing of the MPC throughout the developed world. Conceptually, this was to some degree based upon the publication in 1965 of the Melzack-Wall Gate Hypothesis that postulated downstream modulation of the central propagation of nociceptive information and the subsequent Melzack and Casey paper emphasizing downstream modulation and the roles of nonsensory factors in pain perception and responses.<sup>5,6</sup> Outcome studies, although sometimes not of highest quality, demonstrated that MPCs were capable of improving function and reducing the complaint of pain by reducing medication consumption and the utilization of other interventions for pain.<sup>7-9</sup> Despite this demonstrated efficacy, in the United States the payers of health care did not like MPCs; nor did many physicians, who were fixated upon the biomedical model of illness. In contrast, the increasing number of interventional procedures done to chronic pain patients has led to little quality outcomes data for these interventions and contentiousness among various types of practitioners in the realm of pain treatments. As hospitals are also searching for revenue generation, they have facilitated the utilization of revenue-producing procedures and removed support from MPCs. The battle between different types of specialists to gain a

share of the interventionalist market is another demonstration of the economic factors that have driven health care in the arena of pain treatment.

By 2000, the number of MPCs in the United States began to dwindle. Programs certified by the Commission on the Accreditation of Rehabilitation Facilities declined from 210 in 1998 to just 84 in 2005. By 2010, a small increase had occurred to a total of 122 Commission on the Accreditation of Rehabilitation Facilities-accredited pain treatment programs.<sup>10</sup> They are certainly few and far between. Throughout most of the United States this optimal type of care for most patients is difficult to obtain. Many other developed countries do have more extensive utilization of the MPC concept. More data on the efficacy and costs of MPC have been published than on any other form of treatment of chronic pain.<sup>11</sup>

There is a schism among pain care providers between the proceduralists and the pain managers; this has led to a fragmentation of the field and lack of support for MPC. As MPC is the most effective currently available treatment for many patients, there should be an ethical obligation to make it available for appropriate candidates. However, economic incentives have propelled physicians and hospitals toward procedural interventions and away from multidisciplinary pain management. We will address some of the ethical issues both within MPC and the reasons for both its strengths and its virtual absence from contemporary American health care. It is thrilling to see that the veterans administration (VA) health system now is strongly supporting the recrudescence of MPCs. There is certainly no single cause of the decrease in MPCs, but fiscal issues have loomed large in their curtailment.

## EVIDENCE FOR EFFICACY OF MPC

Many studies and several meta-analyses testify to the clinical effectiveness of MPCs.<sup>7-9,11</sup> MPC treatment is equally effective as pharmacological, medical, and surgical alternatives in reducing pain, but has a much larger impact upon reducing health care consumption, closing disability claims, increasing functional activities, and returning patients to work. Medication consumption is also reduced by MPC treatment, which is not often the case with the other treatment modalities. Cure of chronic pain is rarely seen with any form of treatment; reductions in pain behaviors are commonly in the 20% to 40% range with MPC. Cost benefits and cost effectiveness of MPC are better than those associated with physical therapy, surgery, implantation of stimulators or pumps, and chronic opioid therapy. Every form of analysis yet undertaken has shown that MPC is as good as or better than any alternative treatment strategies and has a much lower complication rate than many of the others. Furthermore, the costs of disability are also reduced by MPCs far better than any other treatment strategy.

As there is little or no hardware utilized in MPC treatment, there has been no financial support from device manufacturers. Similarly, as the emphasis in MPCs is on curtailing ineffective drug utilization, drug manufacturers have not been eager to support such programs. They have, however, often funded studies of drug treatment, rarely with outcomes as long as 3 months, generating data that are often not meaningful for the treatment of chronic pain patients. Furthermore, their well-documented history of not publishing negative trial results has skewed the literature toward the drug treatment of chronic pain by suppressing the

publication of unsuccessful trials.<sup>12</sup> Funding for research on MPCs as well as for the care they provide has been sparse in contrast to trials with drugs or devices.

### MODELS FOR PAIN TREATMENT, OR, THE HARM OF NOT APPLYING MULTIDISCIPLINARY CARE FOR PATIENTS WITH CHRONIC PAIN

Pain management is always embedded in the overall health care delivery system in a country. When resources are limited throughout the health care system, they will also be deficient in pain management. It is not reasonable to expect a system that lacks resources in general to have a superior program for pain management. In contrast, health care in the developed countries certainly has enough resources to provide good pain management. Unfortunately, this is often not the case when the biomedical model is applied to chronic pain patients. It is important that the best models for care be used when dealing with those who suffer from chronic pain; there are dangers in the pursuit of cure without considering optimal management of the chronic pain patient. These dangers include:

- Repeated diagnostic tests.
- Risks of diagnostic tests to patient's health.
- False positives and negatives leading to inappropriate care.
- High costs of health care.
- Risks of interventions and surgeries.
- Persisting disability that is not addressed.
- Failure to provide rehabilitative care.
- Decreasing likelihood of return to work over time.
- Perpetuation of patient's belief in broken part concept of cause of chronic pain.
- Perpetuation of patient passivity.

Using the biomedical model creates (First do no harm) a moral hazard for the practitioner, as it violates the concept of *primum non nocere*. The pursuit of cure indicates a failure to recognize that a patient with chronic pain needs more than symptom relief to be restored to a normal lifestyle. Indeed, repeated episodes of an intervention may actually damage the patient. Physicians may create disability by applying the biomedical model to chronic pain patients. Chronic pain mandates a multidisciplinary approach utilizing a biopsychosocial model for comprehensive pain management. The principles of such a pain management program include<sup>3</sup>:

1. Addressing the physical, psychological, and social components of chronic pain.
2. Treatment by a team of professionals in a rehabilitative program.
3. Treatments must address the pain and its consequences and not just the search for occult causes and their remedies.
4. Treatment must address restoration of well-behaviors and not just symptom alleviation.
5. Medication use must be assessed and controlled so that only those who are improved by a medication continue to receive it.
6. The illness is not just chronic pain but also failure to work; this too must be addressed. Disability is an important aspect of chronic pain.
7. Pain is "transdermal"; the roles of the patient's significant others and workplace must be considered both in diagnosis and treatment.

8. The patient must assume an active role in treatment for chronic pain: passivity perpetuates pain. We should also remember what Peabody<sup>13</sup> wrote 84 years ago: "...for the secret of the care of the patient is in caring for the patient."

### ETHICAL DILEMMAS WITHIN MULTIDISCIPLINARY PAIN TREATMENT

The encounter between the physician and a patient for the purpose of treating a disease is fundamentally different from an encounter designed to rate impairment or determine amount of disability. Confusing the 2 types of encounter creates an ethical dilemma for both the patient and the physician. When the aim of the patient-physician encounter is to establish diagnosis or implement treatment, the physician is acting as an agent for the patient. When the aim is to rate impairment or disability, the physician is acting as an agent of the state or an insurance company. When a compensation system asks a treating physician to perform the rating function, there is a real potential for violation of the patient's trust in the physician and the physician's obligation to the patient. Thinking that the physician is acting on his behalf, the patient provides information, both by history and physical examination that he/she thinks will aid the physician in the provision of care. However, if the physician is evaluating impairment or disability, the information is used to allow another party (insurance company or compensation system) to make determinations that may or may not be in the patient's best interest. The patient may not realize that the physician is acquiring information for the benefit of a third party and to the detriment of the patient. If the patient realizes this shift in allegiance, the trust between patient and doctor can be violated, making the patient less likely to respond favorably to treatment.<sup>14</sup>

In addition to the conflict between the treating and rating relationships, there is another conflict between the purposes of these 2 activities. Alleviating pain and suffering and improving functional status are the primary goals of treatment, whereas rating ignores these important health care issues and seeks to adjudicate an economic issue. In so doing, the patient usually learns that his/her treatment is to be concluded and that no further improvement in his/her status is possible. This undermines the multidisciplinary approach to a pain patient and interferes with a positive treatment outcome. For these reasons we see an ethical mandate to separate the care of the patient from the disability determination process and have recommended that treating physicians avoid the administrative role of disability determination.<sup>15</sup>

Furthermore, the standard evaluation instruments, known as the Physical Capacities Evaluation and the Independent Medical Examination do not have face validity. Using them to assess a chronic pain patient is morally reprehensible. Although both the Physical Capacities Evaluation and the Independent Medical Examination are purported to be objective, neither can meet that criterion. Both are strongly influenced by patient effort and self-report. Neither has ever been shown to have test-retest or interobserver reliability. How can these be valid assessment tools? When a compensation claim reaches the courtroom, each side produces an "expert witness" who directly contradicts the opposing side's witness despite the fact that each expert has sworn on a bible "...to tell the truth, the

whole truth, nothing but the truth, so help me God.” To interject either of these instruments into the physician-patient relationship destroys the purpose of attending an MPC. Both of these instruments are based upon the biomedical model of pain and they subvert the MPC approach to patient management.

Patients also may be damaged in many ways by physicians who continue to utilize a biomedical model for chronic pain. For example, rest may be appropriate after an acute injury, but has never been shown to be beneficial for a chronic pain patient. Indeed, chronic inactivity has been shown to be deleterious for every organ system in the body.<sup>16</sup> Certainly, if rest and inactivity are prescribed by the physician, the patient acquires a disability that may not be driven by the underlying injury at all. In MPCs, activity is emphasized and rewarded. Disability is thereby reduced, not facilitated by the patient’s health care. Suggesting to the patient that he or she has a broken part in the body that is leading to symptoms can also create an adverse health care outcome. Fear of activity, hopelessness, and failure to engage in rehabilitative activities can ensue. Patients need to learn that hurt and harm are not synonyms. MPC treatment is aimed at avoiding such pitfalls and is both pragmatically and morally superior to biomedically based care. If a health care system is completely dedicated to cure, it will fail to recognize that patients with chronic pain need a different set of services.

*For each ailment that doctors cure with medications (as I am told they occasionally succeed in doing) they produce ten others in healthy individuals by inoculating them with the pathogenic agent a thousand times more virulent than all the microbes—the idea that they are ill. (Marcel Proust in Guermante’s Way)*

Although the alleviation of pain and suffering has been 1 of the oldest traditions of western medicine, there is no guarantee that this will be included in the evolving EBM of the 21st century. Attention will probably be directed to acute pain after injury and surgical trauma, as these are easier to accommodate in a biomedical model and easier to study: outcomes are easier to discern. However, the treatment of chronic pain may not be funded in a system that is predicated upon fixing broken parts with immediate solutions. The direct patient contact that is required to understand the patient’s narrative, assess the factors contributing to the pain, and design a comprehensive management program may be beyond the scope of a slimmed down health care system. A mandated 7- or 10-minute office visit does not allow chronic pain management. Furthermore, the dependence on evidence from randomized, double-blind, prospective clinical trials to establish funding for care will impede MPC. There is just too little data, too few RCTs, too little funding for doing such studies, and too few people to carry them out. Furthermore, the information obtained in RCTs may not be relevant to community-based health care; cohort studies may be more applicable although potentially less definitive. Chronic pain patients will be shunted away from health care into other social service realms with less opportunity to help patients restore normal activities and ameliorate their pain and suffering.

Furthermore, EBM has been thought of as a method of changing the behavior of physicians, but there are other actors in the play of chronic pain who make decisions that facilitate or impair multidisciplinary pain management. Insurance agencies, hospital administrations, professional

associations, pharmaceutical and device manufacturers, and governmental administrators all make decisions, usually based upon financial considerations and they are not committed to the alleviation of pain and suffering in patients. As these are business-oriented entities, their actions may not be consonant with ethically based patient care. For example, the ethical principle of autonomy may be violated when the option for multidisciplinary pain management is removed by the financial concerns of hospital administrators or funding agencies. The policies of insurance and hospital agencies may undermine many of the fundamental rights of the chronic pain patient and often seem to violate basic ethical principles that should apply to those who regulate and administer health care and not just to those who actually provide the care.

The overwhelming problem for chronic pain management is how to realign the financial incentives with what is the best available care for the patient. We have seen some of this occur in the managed care aspects of American health care: the military and the VA. In response to vigorous lobbying and citizen complaints, command decisions have now mandated that pain management in all its aspects be included in the services offered to the US military and military veterans. The pain movement was able to mount vigorous campaigns to get this decision-making process implemented, to no small degree due to the exposes of poor care by the media. In the private sector, much less has happened. Managed care organizations may, or may not, provide adequate services for chronic pain patients.<sup>17</sup> Unlike surgical procedures, it is difficult to establish standardized outcomes measurements for pain to evaluate quality of care. A large public lobby does not exist to compel the health care system to include pain management and adding something to the health care system increases costs. Some mechanism must be found that shifts the care of chronic pain patients away from short-term relief with procedures that do not alter the trajectory of their disease to more effective management by MPCs. Certainly the movement to mandate recording of outcomes will have a salutary effect on which treatments are offered to chronic pain patients. We shall see whether this is likely to occur in the near future; we are not optimistic about this sea change, despite the recently released Institute of Medicine Report.<sup>10</sup>

## INTERVENTIONAL PAIN TREATMENTS

A large number of health care providers earn their livings providing injections and percutaneous surgeries to patients with chronic pain. Repeated attempts to demonstrate the validity of such approaches to chronic pain patients have produced sparse evidence for their efficacy. At best, evidence for short-term benefit as measured by pain scores has been produced; restoration of function has rarely been demonstrated. Almost every month some new procedure is touted by its providers to be a panacea for some type of chronic pain, most often, of course, low back pain. Some patients are certain that their pain problems have been alleviated by such procedures; just as the providers are certain that benefits accrue to their procedures. The debate about the role of needle-based interventions has produced a series of guidelines promulgated by a wide array of organizations. It seems that the likelihood of such guidelines including a procedure is a function of how many people on the guideline writing committee earn a substantial part of



their living by doing such procedures or whether or not representatives of the relevant device manufacturers were on the guidelines writing committee. A less partisan organization has a much lower likelihood of interpreting the evidence as favorable to the inclusion of such a procedure in their guidelines. This has resulted in “battles of guidelines” that contain much invective but little wisdom. We do not argue that there is no role for interventional procedures; rather, that interventions must be evaluated as a component of multidisciplinary treatment programs. No one should receive an intervention before thorough, multidisciplinary assessment. No intervention should be repeatedly undertaken without outcomes data that has demonstrated its efficacy and potential risks. Furthermore, Food and Drug Administration approval for a device or drug is based upon superiority to a placebo in a randomized, double-blind controlled trial. Such a trial may be of limited duration and may not contain a representative sample of those who hurt. In reality, practitioners need to know how a new procedure or drug compares to existing treatments, but such head-to-head trials are almost never undertaken. Enthusiasts often claim fantastic results with impunity. We do not know whether the plethora of interventional treatments is driven by greed, fascination with new technology or drugs, doing “stuff,” lack of feedback on outcomes, or the desire to relieve pain and suffering, or some combination of these. At the present time, most pain fellowships focus upon procedures, not multidisciplinary pain management. Far too many trainees are attracted by the potentials for revenue generation in their future practices. They will not facilitate the increased implementation of MPCs.

### WORKMEN'S COMPENSATION (WC) SYSTEMS

Franz Kafka earned his living as a clerk in the WC Bureau in Prague. To this day, compensation systems tend to maximize disability and deter return to work. They all-too-often impede the management of the chronic pain patient. WC systems work fairly well for acute injuries with obvious impairments. They do not work well for subtle injuries such as low back pain. They commonly fail to identify problem patients until their pain behaviors are well established. They often restrict certain types of health care because of the prejudices of those who run such systems. The beneficiary is often dehumanized by the system and its employees. Economic incentives for all of the parties involved in WC systems are perverse and do not encourage the behaviors that each of the participants is expected to manifest. Creating a compensation system that is beneficial for chronic pain patient well-being is going to be a difficult task, as there are too many vested interests, each determined to protect what it likes in the status quo. It is common to talk about the “moral hazard” of compensation systems as if the beneficiary was the only actor in the compensation system who could be responding to inappropriate reinforcers. In fact, each of the participants, from the providers, the administrators, the claims managers, the attorneys, the expert witnesses, and others have the opportunity of gaming the system for their personal benefits; moral hazards are not restricted to injured workers. There is an industry related to disability determination and its adjudication; the business aspects of this endeavor may be more prominent than the desire to help those who suffer from chronic pain and its ensuing disability. It is all-too-

common for injured workers enmeshed in a compensation system to become depressed, deactivated, and demoralized, thereby jeopardizing further the likelihood of a timely return to work and the perpetuating their chronic pain.

### THE ROLE OF CONTINUING MEDICAL EDUCATION (CME)

Much of the funding for CME comes from industry; this biases the content of major meetings and local CME activities. Interposing a for-profit educational organization between industry and the CME course does not reduce the inherent biases due to the funding source. Hence, health care providers are presented with much more information relevant to drugs and devices than is warranted on the basis of evidence for their efficacy in the management of chronic pain. There is little support for CME aimed at multidisciplinary pain management, although recent changes in the VA system and other health care agencies have certainly reduced the bias toward pharmaceutical and device educational programs. At major national meetings of pain organizations, a disproportional amount of meeting time is devoted to monotherapies, especially those related to drugs. The number of lecturers who can address the topic of multidisciplinary pain management is small and the audience for this is often sparse, as this is poorly remunerated cognitive work devoid of procedural revenue.

### DIRECT TO PATIENT AND PHYSICIAN ADVERTISING

The role of “big pharma” in pushing use of drugs in pain management is often detrimental to patient well-being. Patients are ill-equipped to select drugs for pain management. Direct to patient advertising bypasses medical determination of useful treatments. It must be successful in increasing drug consumption or the manufacturers would not spend so much money on it. Physicians have often been misled by both print-based and meeting-based advertising and the representatives of drug manufacturers. This is similar to the role of interventional device manufacturers in pushing use of needle and surgical interventions for treatment of chronic pain, especially low back pain. Manufacturers have as their primary mandate making profits for their shareholders. This often conflicts with what is best for the consumers of health care. Detailing of physicians is a successful method of increasing prescriptions for a drug.

### MEDICAL CENTERS AND CHRONIC PAIN MANAGEMENT

The typical American hospital is a free-standing organization that attempts to generate profits from its clinical activities. Unless the hospital is part of a managed care organization, there is absolutely no feedback as to how the health care services provided influence either future health care or functional status after discharge. Hospitals want to see their beds filled and their facilities maximally utilized. Chronic pain patients are all-too-often seen as potential consumers of diagnostic and therapeutic procedures in radiology and operating rooms. Yet, this is rarely something that chronic pain patients benefit from. So the hospital invests millions in sophisticated equipment, whereas the patient needs education and training in self-management, usually low-technology processes. It is no wonder that chronic pain management is not even considered in most

hospitals, whereas injections and implants are thought to be the resources needed for chronic pain patients. Hospitals all-too-often make decisions based upon increasing market share of profitable activities; multidisciplinary pain management cannot compete with organ transplants in this arena.

### PAIN EDUCATION IN MEDICAL SCHOOLS

The standard medical school curriculum in the United States is a barrier to quality pain management. Indeed, the medical school curriculum is one of the last vestiges of the feudal system in contemporary democracies. In most schools, the curriculum is archaic, perpetuates itself in the absence of feedback from practitioners, and is owned by faculty members who often know little of and care less about pain and the moral obligations that accompany it. Pain educational deficiencies occur in both science basic to medicine and the clinical education programs. Poorly educated physicians fail to identify treatable pain problems, try to hide from patients with chronic pain, do not know even the basics of the treatment of pain patients, and, are remiss in meeting their moral obligations to help those who suffer. It is no wonder that the products of such an educational system do not develop adequate patient care skills and fail to recognize the utility of multidisciplinary pain management and its components. An important step in the ethical approach to pain patients is, therefore, improving the education about pain and pain patients that medical students receive. This should be a moral obligation for a medical school faculty. It will not be an easy process, however, and it is not likely that a single curriculum plan can be developed that is compatible with each school's educational format. These issues were highlighted in the Mayday Pain Report<sup>18</sup> of November 4, 2009 that discussed the shortcomings in health care delivery for patients with pain in the United States. Medical schools and their faculty should identify the need to improve pain education for their students and residents in training under their auspices. We recognize that there are a small number of medical schools that have identified the importance of pain management and do provide a reasonable adequate exposure for their students to the issues of pain management. Such schools are few and far between in the United States. Organizations such as the International Association for the Study of Pain and many of its national chapters and other pain professional organizations have published curricular guidelines for medical students and other health care professionals. Implementing such guidelines is much more difficult than generating them. Parenthetically, we believe that the vast majority of chronic pain management should be in the hands of primary care practitioners, an endangered species in the United States. It is not a matter of training more pain specialists but rather the introduction of basic pain management into primary care specialty educational programs. The overwhelming majority of pain patients must be managed by primary care providers. The recent Institute of Medicine Report on pain in the United States sends a clarion call that improvements in education about pain are mandatory.<sup>10</sup>

### CONCLUSIONS

Chronic pain management requires both programmatic and ethical changes in contemporary health care. A moral obligation exists to relieve pain and suffering, and this must trump the economic determinism that plagues

health care in the 21st century in our country. New ways of providing care are required to make chronic pain management a feasible option in a system aiming at cost-efficiency. Health care for a chronic pain patient must be measured in terms of long-term outcomes, not immediate and only short-term effects. Medical decisions must be placed ahead of profit making. Multidisciplinary pain management with a focus upon cognitive and behavioral strategies and medications and interventions must be the basis for contemporary pain management.<sup>19</sup> Diagnosis must precede treatment; chronic pain is rarely the result of a broken body part. Financial incentives for all sectors of the health care delivery system must change so that they reinforce doing what is right for the patient. What is funded should be based upon long-term outcomes studies that are patient centered. There is a moral obligation for physicians to be educated about chronic pain and to utilize what they have been taught for the care of their patients. We hope to see some of the issues we have discussed addressed in the coming years.

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