Inadequate Analgesia in Emergency Medicine

Review of emergency department pain management practices demonstrates pain treatment inconsistency and inadequacy that extends across all demographic groups. This inconsistency and inadequacy appears to stem from a multitude of potentially remediable practical and attitudinal barriers that include (1) a lack of educational emphasis on pain management practices in nursing and medical school curricula and postgraduate training programs; (2) inadequate or nonexistent clinical quality management programs that evaluate pain management; (3) a paucity of rigorous studies of populations with special needs that improve pain management in the emergency department, particularly in geriatric and pediatric patients; (4) clinicians’ attitudes toward opioid analgesics that result in inappropriate diagnosis of drug-seeking behavior and inappropriate concern about addiction, even in patients who have obvious acutely painful conditions and request pain relief; (5) inappropriate concerns about the safety of opioids compared with nonsteroidal anti-inflammatory drugs that result in their underuse (opiophobia); (6) unappreciated cultural and sex differences in pain reporting by patients and interpretation of pain reporting by providers; and (7) bias and disbelief of pain reporting according to racial and ethnic stereotyping. This article reviews the literature that describes the prevalence and roots of oligoanalgesia in emergency medicine. It also discusses the regulatory efforts to address the problem and their effect on attitudes within the legal community.


INTRODUCTION

Inadequate pain management by the medical profession has been a recurrent and heated topic of discussion since a landmark 1973 article by Marks and Sachar.1 Marks and Sachar, psychiatrists routinely called on to evaluate drug-seeking behavior and addiction in hospitalized medical patients, concluded that the majority of the patients they examined simply had severe untreated pain. Their study contested the rationale that physicians offered to explain the stinginess of their prescribing habits, the belief that psychological addiction necessarily resulted from the regular use of opioid medications for pain control.1 Although this concern has been repeatedly debunked, this
and similar attitudes that inhibit the adequate use of analgesics remain strongly entrenched in medical practice 30 years later.1-3

The nature of emergency department (ED) practice requires that emergency physicians be well versed in pain management strategies. A 1997 survey showed that 22% of 94.9 million ED visits resulted in pharmacologic therapy for pain.4 Despite this large experience, analgesics were prescribed to fewer than 1 in 5 ED patients who reported pain as a complaint.5 Another noted that half of patients treated for acutely painful conditions did not receive prescriptions for pain management at discharge.6 Patients who received analgesics waited an average of one hour in one study,7 whereas suboptimal dosing occurred in 33% of patients in another.8 One urban, university-based ED study reported that only 40% of patients with sickle cell vaso-occlusive crisis, thermal burns, or long-bone fractures received analgesics, and only 45% had pain medication prescribed at discharge.9 A pediatric ED study showed that 31% of children with long-bone fractures and 26% of children with second-degree burns received medication for pain. In the same ED, 100% of children with vaso-occlusive crisis received pain medication, with relief of pain documented in 88% of these children.10 Despite this evidence of knowledge about pain control in children, the management of painful conditions other than vaso-occlusive crisis was clearly suboptimal.

Problems with oligoanalgesia are not unique to the United States. A prospective study of patients with orthopedic trauma from 2 Costa Rican EDs showed that only 11% of adult patients and 4% of pediatric patients received analgesia.11 Extensive Canadian literature on pain management documents attitudes, inadequacies, and concerns that parallel those encountered in the United States.12,13

A retrospective evaluation of 2 years of pediatric ED visits for long-bone fractures and burns compared pain management in children aged 2 to 6 years with children aged 6 to 10 years. Children in the younger age group were significantly less likely to receive analgesics, 70.6% versus 48.8% for fractures and 50% versus 25% for burns, and were less likely to receive opioid analgesics.14 Site differences in pain management practices were evaluated in a study of long-bone fractures in 3 EDs: an academic and a community setting where adults and children were treated in the same area and an academic community ED where children and adults were treated in separate areas.15 Seventy-three percent of patients in the academic community ED received pain medication in contrast to 51% in the nonacademic community ED. Although children in the separate pediatric ED were as likely as adults to be medicated for pain, children in the combined EDs were significantly less likely than adults to receive pain medication. Data on 2,828 patients with clavicle and extremity fractures revealed that 64% received some form of analgesia and 42% received an opioid.16 A subgroup analysis of 1,670 patients with recorded pain scores showed that 73% with “moderate to severe” pain received analgesia and 54% received an opioid. Children younger than 15 years and treated in EDs that treat adults and children were significantly less likely than adults to receive pain medication, whereas children treated in pediatric EDs had the same likelihood of receiving pain medication as adults.16

Emergency medical services (EMS) and out-of-hospital care are unique areas of emergency medical practice. Although most EMS systems have protocols that allow medics to administer opioids for acute pain, recent articles demonstrate low rates of use. In one large study of patients with extremity fractures, only 2% received analgesics.17 One study that evaluated analgesic use in elderly patients with suspected lower extremity fracture showed that 18% of elderly patients received analgesia18 in contrast to 51% in a second similar study.19 Whether these significant differences in rates of analgesic use reflect educational priorities, attitudes of the medical or paramedic leadership, patient differences about other associated injuries, or system factors such as varying transport times is unclear.

EVIDENCE OF OLIGOANALGESIA IN EMERGENCY MEDICINE

Studies of pain management began to appear in the emergency medicine literature around 1990. Most are retrospective studies of patients with acute conditions that are perceived by most to be painful. Although these studies differ in design and population surveyed, together they document a historical litany of oligoanalgesia across a broad demographic range of patients and practice settings. In one prospective study, opioid analgesics were prescribed to fewer than 1 in 5 ED patients who reported pain as a complaint.5 Another noted that half of patients treated for acutely painful conditions did not receive prescriptions for pain management at discharge.6 Patients who received analgesics waited an average of one hour in one study,7 whereas suboptimal dosing occurred in 33% of patients in another.8 One urban, university-based ED study reported that only 40% of patients with sickle cell vaso-occlusive crisis, thermal burns, or long-bone fractures received analgesics, and only 45% had pain medication prescribed at discharge.9 A pediatric ED study showed that 31% of children with long-bone fractures and 26% of children with second-degree burns received medication for pain. In the same ED, 100% of children with vaso-occlusive crisis received pain medication, with relief of pain documented in 88% of these children.10 Despite this evidence of knowledge about pain control in children, the management of painful conditions other than vaso-occlusive crisis was clearly suboptimal.

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Adequacy of Training in the Assessment and Management of Pain

The cumulative factors that contribute to a provider's willingness to provide analgesia may be partly affected by accuracy in assessment of pain severity. Underestimation of pain has been confirmed in several studies that compared patients' pain scales with caregivers' values for acute painful conditions. Nurses tended to underestimate pain more often than physicians in 2 studies.

Underestimation of patients' pain by provider pain scores may in some cases simply reflect the limitations of the assessment tool. Pain assessment tools are bounded at the extremes by verbal descriptors such as “no pain” and “worst pain imaginable.” Although patients and providers share a common understanding of “no pain,” “worst pain imaginable” is interpreted differently and varies from patient to patient. On average, health care providers would be expected to rate pain as less than their patients' ratings because of differing frames of reference at the high end of the pain scale. True underestimation may occur because the evaluation of painful experiences by proxy does not likely yield the same assessment as pain actually experienced. It is also possible that the observation of painful experiences on a daily basis may blunt a clinician’s capacity to appreciate pain.

Inadequate knowledge of effective pain management strategies was demonstrated in a 1985 study of cancer patients at a university-affiliated community hospital, where acetaminophen preparations and meperidine accounted for 85% of all prescribed analgesics. Less than one third of cancer patients in this study received medication more often than every 6 hours.

A survey of practicing emergency physicians indicated that nearly half felt uncomfortable with the management of pain in elderly patients. Physicians cited inadequacies in training and continuing education as contributing factors. A survey of elderly ED patients showed that only half could provide information about their prescription medications or dosing schedule. Emergency physicians may be reluctant to prescribe pain medication to elderly patients when they do not have access to the medical record. Increasing access to computerized medical and pharmacy databases should help to overcome this patient care barrier.

Failure to treat children with painful conditions suggests discomfort with medication of the child. Although one retrospective study demonstrated that emergency physicians were more likely than pediatricians or family practice physicians to prescribe potent analgesics to children, the rates for potent analgesic prescription overall for pediatric patients are demonstrably lower than that of adults with similarly painful conditions.

Scrutiny of the Model of the Clinical Practice of Emergency Medicine does not reveal a formal emergency medicine curriculum in pain management. The topic of pain management is listed as an “other technique” in Appendix 1: “Procedures and Skills Integral to the Practice of Emergency Medicine.” It is further cross-referenced to the category of anesthesia, which includes local and regional nerve blocks and sedation and analgesia for procedures. The most effective way to educate clinicians about pain management eludes even the leaders in emergency medicine education.

Prospective studies demonstrate that simple educational efforts to increase knowledge about analgesic options and the management of adverse effects result in higher rates of patient satisfaction with ED analgesia. A single 4-hour formal didactic presentation to emergency medicine residents on pain management demonstrated a significant improvement in patient reports of pain relief. Broader curriculum changes that focus on pain management in nursing school, medical school, and residency training will be essential elements to the successful practice of pain management.

Attitudes about Chronic Pain

“Chronic noncancer pain” is defined as pain lasting at least 6 months “or of a duration longer than the expected time to tissue healing or resolution of the underlying disease process, or a condition where there is ongoing nociception.” There is a growing acknowledgment that patients with chronic pain are undertreated and that opioids have a significant role in the management of chronic pain, in conjunction with other nonopioid modalities. Evidence gathered by the World Health Organization in 15 primary care sites across Asia, Europe, Africa, and the Americas showed that chronic pain is associated with functional impairment, anxiety, and depression in 5.5% to 33% of patients. Despite a lack of evidence to support the development of addiction in patients treated with opioids for chronic pain, it remains a major concern for physicians. In a survey of California family practice physicians that assessed attitudes toward the use of opi-
oids for chronic nonmalignant pain, one of the greatest impediments to the use of opioids was concern about dependency.34

OTHER FACTORS IN MEDICAL CULTURE THAT INFLUENCE ANALGESIA

Even when obvious causes of acute pain are identified, perceived causes of pain influence physicians’ decisions to treat it. This concern is demonstrated in a study of acute pain by Friedland et al10 in pediatric patients described previously in which the medical culture and knowledge base of their institution support the use of analgesics in management of vaso-occlusive crisis but fail to recognize the need for analgesia in patients with burns and fractures.10 The importance of the cause of chronic pain in prescribing practice is revealed in a survey of family practitioners asked about the use of schedule II opioids for management of chronic pain syndromes. Forty-seven percent of family practitioners never prescribe schedule II opioids for postherpetic neuralgia, 57% never prescribe them for low back pain, and 75% never prescribe them for chronic headache.34 A reasonable hypothesis to explain this discrepancy is that tangible proof of a cause of pain (the scars left by “shingles” or radiologic demonstration of degenerative disease of the spine) influences physician practice more than the patient’s subjective report of pain.

The use of pain medication in patients with acute abdominal pain continues to be controversial, despite 3 well-designed emergency medicine studies that demonstrated that early administration of an analgesic study drug allowed patients to relax, removed voluntary guarding as a confounding factor, and permitted a fairer assessment of localized tenderness.35-37 The administration of morphine to pediatric patients with abdominal pain did not affect the clinician’s ability to recognize children with surgical conditions.38 Although many emergency physicians believe that judicious administration of pain medication does not compromise the physical examination, the majority of emergency physicians in one study still withheld analgesics until after the patient had been evaluated by a general surgeon.39,40 Although some emergency physicians may simply dread conflict with surgical consultants, they may also have learned pain management techniques from other disciplines, such as general surgery, in which prejudice toward withholding analgesics remains firmly entrenched.

The first edition of Cope’s Early Diagnosis of the Acute Abdomen recommended withholding opioid analgesics to prevent masking the progression of pathologic abdominal processes. In the 20th edition, a paradigm shift has occurred toward an understanding that the judicious use of analgesics in the setting of acute abdominal pain is appropriate.41 Changes in attitude that are reflected in major respected texts may facilitate attitudinal changes toward treatment of abdominal pain. Silen41 acknowledged, however, that given the deeply rooted prejudice against the administration of analgesics, a change in surgical practice will likely take several generations to be realized.

MYTHS REGARDING THE MANAGEMENT OF PAIN: COMPETENCE AND INFORMED CONSENT

Physicians’ misconceptions about competence and informed consent result in convictions that treatment of pain will compromise patients’ decisionmaking capacity, which commonly results in the withholding of pain medication, usually in surgical cases, until consent is obtained. “Competence” is a legal condition determined by the courts, the basis of which varies from state to state. The process of obtaining informed consent for medical interventions assumes competence and requires the demonstration that at the time of obtaining consent, the patient (1) understands his or her situation; (2) understands the risks associated with the decision at hand; and (3) communicates a decision according to that understanding. Most states have established criteria for the demonstration of informed consent according to legislation or case law.42 The belief that the ability to give informed consent is affected by the use of opioid analgesics to relieve pain has been challenged by 2 ED studies that demonstrate that patients retain their ability to give informed consent despite the effects of analgesics.43,44 Most hospitals have administrative guidelines that allow the use of opioid pain medications in patients for whom operative intervention is required. In our experience, these are most often honored in the breach.

Dr. Gail Van Norman makes the following observations according to biochemical considerations:

When pain medications are withheld, patients may feel pressured to consent in order to obtain medication to relieve their suffering. In some instances, premedication may actually enhance a patient’s ability to make decisions, by provid-
Society standards for the management of pain in cancer patients did demonstrate improvements in patients’ satisfaction, as well as nurses’ knowledge and perceptions of barriers to the management of pain.50

PAIN RESEARCH IN THE ED SETTING

Despite an explosion of analgesia research, indicated by more than 23,000 randomized, controlled trials reported in the Cochrane database, there have been few clinical trials specific to emergency medicine practice on which to establish an evidence-based approach. The challenge for emergency physicians is to identify data clinically relevant to the ED setting while fostering controlled, randomized studies within their own milieu.51 There is evidence that emergency medicine as a specialty is rising to the challenge of pain management research. A MEDLINE search of the literature between 1990 and 1996 that combined the term “pain” with “emergency medicine,” “emergency department,” or “emergency medical services” yielded only 60 articles.52 A similar search of June 2001 articles that was limited to controlled clinical studies yielded approximately 300 studies.

CHALLENGES OF THE STUDY OF THE EFFICACY OF PAIN RELIEF

Perception and depth of pain appear to vary considerably among individuals. Some patients receive substantial relief from placebo; others require large doses of opioids to relieve pain. Surgeons in the military have long been aware that some soldiers wounded in battle do not require morphine for pain relief.53 We have all encountered patients with acute fractures who do not appear to have pain or indicate that they have pain when questioned. Animal studies have demonstrated genetic polymorphisms that govern the experience of different types of pain.54 Studies of the genetics of the pain experience have received increased attention, and federal funding has been made available for such research.55 This type of research may ultimately provide better tools with which to evaluate patients with pain in the clinical setting and help to destigmatize patients who appear to experience pain out of proportion to what one “should experience.”56

From our clinical perspective in the ED, we have been of necessity working blindly with crude tools. It is difficult enough to evaluate and quantify a patient’s

Mandated Changes in Institutional Priorities

The US Department of Health and Human Services Agency for Health Care Policy and Research (now the Agency for Healthcare Research and Quality) was created in 1989 to address problems of health care access. This agency, which first published institutional guidelines for acute pain management in 1992, has made pain management a priority for more than a decade. Yet despite the prestige and visibility of this institution, most hospitals surveyed 1 year after the guidelines were published had neither developed pain management programs nor made plans to establish such programs.46 Failure to address this problem as a profession has led to the imposition of a regulatory solution by the Joint Commission for the Accreditation of Healthcare Organizations that provides standards for the evaluation of pain and provisions for punitive financial consequences for health care institutions that do not meet them. These regulations require health care organizations to implement and give priority to pain management strategies across all departments. These strategies must include ongoing education of providers and patients, pain assessment throughout the hospitalization, discharge planning that includes pain management, and quality management programs that measure progress.47,48 It is anticipated that these mandated institutional changes will lead to improved pain management practices and patient outcomes.

There are few data in the emergency medicine literature to demonstrate the effect of implementation of pain scores and ongoing evaluation of painful conditions in the ED setting. Patients with painful illness often remark that the intense focus on charting pain levels detracts from more important aspects of caretaking that the nurses can provide. One randomized controlled trial of bedside charting of pain levels in cancer patients failed to show a significant effect on care.49 Another study of implementation of American Pain

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pain prospectively; it is even more difficult to evaluate it retrospectively. Despite a growing understanding that not all patients experience pain the same way, it is unlikely that all the patients who have been characterized as undertreated in our emergency medicine studies were genetically configured to experience no pain. In addition to patients who experience less pain, there are some patients who simply refuse to accept pain medication. Prospective studies are needed to ascertain what percentage of treated patients with acute painful conditions represents reasonable goals by which to measure the adequacy of pain management through quality management processes.

**SPECIAL CASES: ACUTE PAIN IN THE ELDERLY PATIENT**

ED visits increased from 90.3 million to 107.5 million visits between 1996 and 2001, and persons aged 75 years and older had the highest rate of ED visits in any surveyed year. Between 1980 and 2000, the number of patients older than 65 years and treated in all medical care settings increased from approximately 25 to 35 million. Patients older than 65 accounted for more than 13 million ED visits in 1990, a number that increased to 15 million in 1995. A 1993 Medicare study showed that 18% of 9,784 beneficiaries identified in a national cross-sectional survey had visited an ED at least once during that year.

Increased potential for drug-drug interactions and adverse effects of pain medication increase the challenge of pain management in the elderly. Medical comorbidities result in polypharmacy that increases the risk of drug-drug interactions. Emergency physicians commonly encounter elderly patients with long lists or bags full of medications, some of which are expired or have conflicting indications. In addition, age-related changes in drug pharmacokinetics and pharmacodynamics alter the distribution, metabolism, elimination, and the timing of a drug’s effect, increasing the risk of adverse reactions to almost any prescribed drug. Adverse drug events commonly result in hospitalization of elderly patients. Nearly 90% of geriatric admissions to one Canadian tertiary care facility were precipitated by a drug-related adverse event. Changes in prostaglandin physiology also predispose this population to an increased risk of adverse events related to nonsteroidal anti-inflammatory drugs such as gastrointestinal hemorrhage, fluid retention that raises blood pressure, and acute renal insufficiency. Despite these statistics, elderly patients commonly leave the ED with new medications that add to the complexity of their drug regimen and increase the risk of adverse events.

**TREATMENT OF THE PEDIATRIC POPULATION: ANALGESIA**

In the emergency medicine literature, little attention has been paid to the treatment of acute pain in children. A recent extensive review of the ED treatment of pediatric orthopedic injuries did not mention the treatment of pain. Poor correlation between children’s assessment of their own pain scores and those of their parents show that parents do as poorly as practitioners at judging the pain severity in their children. Parental lack of knowledge about the risks and benefits of pain medication may also contribute to oligoanalgesia. In a study that evaluated out-of-hospital administration of analgesics, one third of parents who did not administer analgesics to their children thought that giving analgesics would be harmful.

Previous experiences of pain, such as circumcision without analgesia, immunization, or surgery, can promote increased physiologic and psychological responses to the anticipation of pain. Clinicians who feel uncomfortable with the pediatric patient may bring their own anxieties to the patient encounter that contribute to oligoanalgesia.

Emergency physicians typically choose oral analgesics over other routes for children because of concerns about adverse events from parenteral pain medication. Factors that may interfere with effective analgesia from oral agents include a child’s refusal to take the medication, ineffective doses and dosing regimens, decreased bioavailability, inability to tolerate oral medications because of nausea or vomiting, altered gastrointestinal tract motility, and a delayed onset caused by slow absorption.

A potential for adverse drug reactions related to comorbidity also exists in the pediatric population. Numerous adverse reactions to nonsteroidal anti-inflammatory drugs, such as nephropathy or aseptic meningitis, have been reported. Although nonsteroidal anti-inflammatory drug–induced nephropathy is reversible in most cases, irreversible renal failure was reported in an adolescent with sickle cell vaso-occlusive crisis after therapeutic doses of ketorolac. Life-threatening reactions such as angioedema and anaphy-
laxis also occur in patients without documented sensitivities to the nonsteroidal anti-inflammatory drugs.  

TREATMENT OF THE PEDIATRIC POPULATION: PROCEDURAL SEDATION

Procedural analgesia allows us not only to treat acute pain but also to prevent it. Analgesics, sedatives, and anxiolytics may have additive effects when used during procedural sedation, including respiratory depression, apnea, chest-wall rigidity (parenteral fentanyl), myocardial depression, histamine release, and toxic metabolite formation (normeperidine).79,80 Despite the potential for adverse events, the rate for adverse events during procedural sedation was only 2.3% in one study when performed by pediatric emergency physicians.81

Psychological factors have a significant role in the treatment and the experience of pain in children.12 A recent study of children with vaso-occlusive crisis treated with a patient-controlled analgesia pump showed that despite continued high pain scores, they self-administered only 35% of the prescribed medication.82 Parents and caretakers can influence a child’s experience of pain. Parents’ perceptions and concerns about the adequacy of their child’s analgesia during painful procedures must always be addressed. Parental presence during procedures helps to alleviate both the child’s and the parents’ anxieties. The presence of the child’s parents during painful procedures does not affect the performance of clinicians or increase their anxiety.83

Drug-Seeking Patients

Emergency physicians frequently express concern that patients may manufacture complaints in an effort to receive opioid analgesics. There is no doubt that there are patients whose patterns of use of emergency services supports a diagnosis of drug addiction and drug seeking. Unique features of emergency medicine, namely 24-hour availability, brief physician-patient encounters, and limited access to medical records, create a significant potential for prescription drug abuse. Nevertheless, patients with drug-seeking behavior display patterns that become recognizable over time, including frequent visits with different pain complaints and significantly higher community-wide ED visit rates.84

An excessive tendency to attribute requests for pain relief to “drug-seeking behavior” contributes to oligoanalgesia. Mistrust of patient reports of severe pain has been frequently associated with failure to diagnose serious conditions associated with intravenous drug use, such as necrotizing fasciitis or epidural abscess. The identification of obviously painful conditions should preclude any concern about drug seeking or addiction. In addition to attitudes of health care providers toward substance abusers, a lack of knowledge about the pharmacology of opioids contributes to inadequate pain management in opioid-tolerant patients, such as those in methadone maintenance programs.85 Large doses titrated to effect may be required to control pain in patients who are physically tolerant to opioids.

Opiophobia

Society’s attitudes toward opioids sometimes stray from the purely scientific and take on a moral tone that affects the conduct of the law, medical practitioners, and the public. Legitimate concerns about chronic addiction and abuse blend with moral distaste for the pleasures of opioid use and disdain for persons with psychological addiction to their euphoric effects. Such attitudes may be inappropriately directed toward persons who seek relief of pain, resulting in mistrust of the patient’s description of their pain and, ultimately, oligoanalgesia. Patients and health care providers express inappropriate fears of “addiction” when opioids are used for chronic pain management and wrongly equate the tolerance and physical dependency that is a natural outcome of chronic use of opioids with the development of psychological addiction. Studies repeatedly demonstrate the failure of addiction to develop in patients with chronic pain disorders treated with opioid drugs.1-3,86

Patient advocates in the legal profession have coined the term “opiophobia,” which describes the “unscientific and irrational fear that many people, including health-care providers, have of the dangers and evils of narcotics, even when prescribed to relieve pain.”87 Or, as Marks and Sachar1 concluded, “For many physicians these drugs may have a special emotional significance that interferes with their rational use.” These attitudes are likely the greatest barrier to appropriate management of pain.1,88,89

Many physicians who manage chronic pain express concerns that the legal and regulatory manifestations of “opiophobia” limit their legitimate prescription of opioids.89 Congress passed the Pain Relief Act with the intent of removing this threat of inappropriate legal lia-
bility and disciplinary action against health care professionals who follow established guidelines in the management of chronic pain. To the extent that states adopt the tenets of the Pain Relief Act, alleviation of these fears should lead to improvement in pain management practices. Laws that incorporate these principles exist in a number of states. In 1994, the California Medical Board disseminated guidelines for the use of opioids in the management of chronic nonmalignant pain. A survey of California family practice physicians showed that the greatest impediments to the use of opioids for chronic nonmalignant pain were related to concerns about dependency and threat of regulatory censure. Only 39% of the family practice physicians recalled reading the state guidelines. Nineteen percent of the respondents said that they would never prescribe opioids to a child younger than 18 years, and 42% would never prescribe them to a person who was a substance abuser, even if recommended by an expert consultant.

### CULTURAL AND SEX DIFFERENCES IN THE ASSESSMENT OF PAIN

The decision to treat acute pain has been shown to be influenced not only by a patient's age but also by sex, language, and cultural differences between health care providers and patients; bias based on racial and ethnic stereotypes; and moral judgments about lifestyles or concerns about addiction. In one study of ED patients with headache, neck pain, or back pain, female patients described more pain and were perceived by clinicians to be in more pain than male patients with similar problems. Female patients were more likely to receive pain medication and received higher dosages and more potent analgesics than male patients with similar complaints.

Race and ethnicity have been shown to significantly affect the likelihood of treatment for acute pain in some settings and not in others. Although a United Kingdom study of patients with long-bone fractures did not demonstrate differences in analgesic treatment offered to Bangladeshi versus white patients, 2 retrospective studies from large urban US EDs demonstrated that black (Atlanta, GA) and Hispanic (Los Angeles, CA) patients with long-bone fractures were less likely than white patients to be treated for pain. This racial disparity persisted across all variables such as age, sex, insurance status, language capability, and need for reduction or surgical treatment. In a San Francisco, CA, study of patients with long-bone fractures, nonwhite patients were equally likely to receive analgesics as white patients. Although there is no evidence available to suggest that the neurophysiologic experience of pain varies across sex or cultural boundaries, behavioral responses to pain appear to be significantly influenced by culture. The manner in which a patient expresses pain, whether emotive, vague, stoic, diffident, or demanding, may reflect personality or cultural variations that are not easily appreciated by every nurse or physician. Such cultural differences, combined with the subjectivity of the pain experience, are factors associated with oligoanalgesia.

### MEDICAL-LEGAL ISSUES IN PAIN MANAGEMENT

Medical malpractice cases that allege failure to adequately manage pain have dealt with end-of-life cases. In 1990, a North Carolina court awarded $15 million to the family of a patient who, before his death, proved that he experienced intolerable pain from prostate cancer because of the failure of a nursing home nurse to administer ordered pain medications. She thought that he would become addicted. In 2001, a California Superior Court found a physician liable under the elder abuse laws for recklessness and abuse for not prescribing enough pain medication to a patient dying of cancer. The court awarded $1.5 million to the family for the patient's pain and suffering.

Legal experts believe that the combination of public awareness of a right to pain relief and written established standards as put forth by the Joint Commission for the Accreditation of Healthcare Organizations and the Agency for Healthcare Research and Quality will lead to increased medical-legal pressure to treat pain adequately. One expert writes: “Until recently the relatively immature practice of pain management amongst care providers has suggested a barrier to malpractice cases, particularly for undermedicating. This situation is poised to change dramatically as pain management becomes an accepted medical practice, as evidenced by state pain policies, accreditation requirements, and clinical practice guidelines.” Another expert writes: “Tort liability can now build on this convergence of medical management standards. It can reflect this convergence in medical practice and amplify the message so that providers hear it and change their practices accordingly. Patients suffer from too much pain.”

In conclusion, the new standards set forth by the Joint Commission for the Accreditation of Healthcare
Organizations will bring the drawbacks and benefits of intense regulatory scrutiny of medical practice. They will also foster much-needed change. Significant changes in medical education will be necessary to change practice, coupled with significant quality-management scrutiny of practices and an institutional expectation of change. ED quality management practices that make pain management a high priority, establishing treatment guidelines, measuring practice outcomes, and continually giving feedback and educating do produce changes in the attitudes and practices of care providers. Such changes result in significant improvement in pain management and patient satisfaction.101, 102

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Address for correspondence: Timothy Rupp, MD, 5323 Harry Hines Boulevard, Dallas, TX 75390-8579, 214-590-1263, fax 214-590-4079; E-mail timothy.rupp@utsouthwestern.edu.

REFERENCES

43. Smithline HA, Mader TJ, Crenshaw BJ. Do patients with acute medical conditions have the capacity to give informed consent for emergency medicine research? Acad Emerg Med. 1999;6:776-780.


