

Emergency Medicine with Insufficient Analgesia

Dr. Manish Sabharwal, Dr. Sonali Saklani, Dr. Shaik Salman Khan
Department of Emergency Medicine, Santosh Medical College, Santosh deemed
to be university, Ghaziabad UP

Dr. Manish Sabharwal
Senior Consultant
Department of Emergency Medicine,
Santosh Medical College, Santosh deemed to be university, Ghaziabad UP

Dr. Mohd Yaseen
Assistant Professor
Department of Emergency Medicine,
Santosh Medical College, Santosh deemed to be university, Ghaziabad UP

Dr. Sonali Saklani
Junior Resident
Department of Emergency Medicine,
Santosh Medical College, Santosh deemed to be university, Ghaziabad UP

Dr Shaik Salman khan
Junior Resident
Department of Emergency Medicine,
Santosh Medical College, Santosh deemed to be university, Ghaziabad UP

Corresponding author

Dr. Manish Sabharwal,
Senior Consultant
Department of Emergency Medicine,
Santosh Medical College, Santosh deemed to be university, Ghaziabad UP

ABSTRACT

Review of emergency room pain management procedures reveals that all demographic groups experience inconsistent and inadequate pain care. The lack of educational emphasis on pain management practises in nursing and medical school curricula and postgraduate training programmes, the lack of adequate or nonexistent clinical quality management programmes, the lack of rigorous studies of populations with special needs that improve pain

management, and other factors all appear to contribute to this inconsistency and inadequacy. The literature that discusses the incidence and causes of oligoanalgesia in emergency care is reviewed in this article. Additionally, it talks about the regulatory initiatives taken to address the issue and how those initiatives have affected attitudes among lawyers.

Keywords:**INTRODUCTION**

Review of emergency room pain management procedures reveals that all demographic groups experience inconsistent and inadequate pain care. The lack of educational emphasis on pain management practises in nursing and medical school curricula and postgraduate training programmes, the lack of adequate or nonexistent clinical quality management programmes, the lack of rigorous studies of populations with special needs that improve pain management, and other factors all appear to contribute to this inconsistency and inadequacy. The literature that discusses the incidence and causes of oligoanalgesia in emergency care is reviewed in this article. Additionally, it talks about the regulatory initiatives taken to address the issue and how those initiatives have affected attitudes among lawyers and 30 years later, similar beliefs that prevent the proper use of analgesics are still deeply ingrained in medical practise. [1-3]

Because of the nature of emergency department (ED) practise, emergency physicians need to be knowledgeable with pain management techniques. According to a 1997 study, 22% of the 94.9 million ED visits resulted in pain medication therapy. [4] Despite the high number of visits for pain relief, oligoanalgesia is still a significant issue in emergency departments and other medical settings where people seek pain management. The seemingly insurmountable resistance of this issue to a solution indicates that its roots are deeply ingrained in our culture of healthcare and that it most likely reflects fundamental societal attitudes as well as those of healthcare professionals.

EVIDENCE OF OLIGOANALGESIA IN EMERGENCY MEDICINE

Around 1990, studies on pain management started to appear in the literature on emergency medicine. The majority of research are retrospective and involve patients with painful acute illnesses. Although the designs and populations covered by these research vary, they collectively present a historical litany of oligoanalgesia spanning a wide demographic range

of patients and practise environments. In one prospective trial, less than 1 in 5 ED patients who complained of pain received a prescription for an opioid painkiller. [5] According to another study, only 50% of patients with acutely painful diseases received prescriptions for pain relief after discharge. In one study, patients who received analgesics waited an average of one hour, while 33% of patients in another trial received insufficient dose. [8] 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 before discharge, according to one urban, university-based ED study. [9] According to a paediatric emergency department research, 26% of kids with second-degree burns and 31% of kids with long-bone fractures both received painkillers. Children having vaso-occlusive crises in the same ED all received pain medication, and 88% of them reported feeling better after taking it. [10] Despite this proof of expertise in paediatric pain management, it was evidently insufficient how to manage other painful diseases outside vasoocclusive crisis. Oligoanalgesia issues are not specific to the United States. Only 11% of adult and 4% of paediatric orthopaedic trauma patients from two Costa Rican emergency departments received analgesics, according to a prospective research. 11 Numerous studies on pain treatment conducted in Canada reveal attitudes, limitations, and worries that are similar to those seen in the US. [12,13]

Pain management in children aged 2 to 6 years and children aged 6 to 10 years was compared in a retrospective analysis of two years' worth of paediatric emergency department visits for burns and long-bone fractures. The likelihood that children in the younger age group would receive analgesics—70.6% versus 48.8% for fractures and 50% versus 25% for burns—and opioid analgesics—was also significantly lower. [14]

In a study of long-bone fractures, site differences in pain management techniques were assessed in 3 EDs: an academic and community setting where adults and children were treated in the same area, and an academic community ED where adults and children were treated in separate locations. 15 Compared to 51% of patients in the non-academic community ED, 73% of patients in the academic community ED received pain medication. Children in the mixed EDs were noticeably less likely than adults to be given pain medication, despite the fact that children in the dedicated paediatric ED were just as likely as adults to be given pain medication. According to data on 2,828 patients with clavicle and limb fractures, 64% of them received analgesia of some kind, and 42% of them got an opioid.

16 Analgesia was given to 73% of patients with "moderate to severe" pain and opioids to 54% of patients, according to a subgroup analysis of 1,670 patients with recorded pain levels. Children under the age of 15 who were seen in emergency departments that also handle adults and children had a much lower likelihood of receiving pain medication than adults, whereas children who were treated in paediatric emergency departments had a similar probability. [16] Out-of-hospital care and emergency medical services (EMS) are two distinct subspecialties of emergency medicine.

Despite the fact that most EMS systems have guidelines that permit doctors to prescribe opioids for severe pain, recent studies show that this practise is rarely used. Only 2% of patients with extremities fractures in a big trial who received analgesics. 17 One study that examined the use of analgesics in older patients with suspected lower extremity fractures found that 18% of elderly patients did so, as opposed to 51% in a second study that was similarly designed. [19] Uncertainty exists regarding the causes of these notable variations in analgesic usage rates, including educational priorities, leadership attitudes among medical or paramedic staff, patient variances regarding other concomitant injuries, and systemic variables such differing transport delays.

ADEQUACY OF TRAINING IN THE ASSESSMENT AND MANAGEMENT OF PAIN

The totality of the elements that go into a provider's willingness to provide analgesia could be impacted in some way. by precision in determining the degree of pain. Numerous research have proven that people often underestimate their pain. studies contrasted caregivers' ratings of acutely painful circumstances with those of patients.6,20-22 Nursestended to undervalue pain more frequently than doctors in 2 studies.[20,21] providers' underestimation of patients' suffering Sometimes, scores may just be a reflection of the restrictions. of the evaluation instrument. instruments for measuring pain are bordered at the extremes by adjectives like "worst pain imaginable" and "no pain," Patients and medical professionals are on the same page The meanings of "worst pain imaginable" and "no pain" fluctuate from patient to patient. In general, It is predicted that medical professionals will categorise pain as due to differences in ratings from their patients, frames of reference at the worst possible level of agony. Because the appraisal of traumatic experiences by proxy does not likely account for true underestimate, it produce the same estimate of pain as is actually felt. Additionally, it's

likely that a clinician's ability to deal with difficult situations could be hampered by their everyday observation of them recognise the anguish.

Lack of understanding of efficient pain treatment in a 1985 study of cancer, techniques were shown to be effective. Patients at a community hospital with a university affiliation, where meperidine and acetaminophen preparations are found accounted for 85% of all analgesics prescribed. Less Compared to one-third of cancer patients in this study, more frequently than every six hours, medicine. [23] Nearly half of emergency physicians in practise said they were uncomfortable managing pain in elderly patients, according to a poll. doctors cited deficiencies in education and training as well as factors that may have contributed.24 A study of elderly ED patients revealed that only half could give details concerning their prescribed drugs or dosage regimen.[25] Emergency medical professionals can be hesitant to prescribe giving elderly individuals who don't use pain medication access the patient's medical record. expanding accessibility Computerized pharmaceutical and medical databases must assist in removing this obstacle in patient treatment.

ATTITUDES ABOUT CHRONIC PAIN

A condition when there is persistent nociception and pain that lasts longer than the anticipated time for tissue repair or the resolution of the underlying disease process is referred to as "chronic noncancer pain." 31 There is growing recognition that patients with chronic pain are undertreated and that opioids, in concert with other nonopioid modalities, play a key role in the therapy of chronic pain. 32 Evidence gathered by the World Health Organization in 15 primary care locations throughout Asia, Europe, Africa, and the Americas revealed that functional impairment, anxiety, and depression are connected with chronic pain in 5.5% to 33% of patients. 33 Despite a paucity of data to back it, doctors are nevertheless very concerned about patients using opioids for chronic pain developing addiction. One of the biggest barriers to using opioids for chronic nonmalignant pain, according to a survey of general practise doctors in California, was worry of reliance. [34]

OTHER FACTORS IN MEDICAL CULTURE THAT INFLUENCE ANALGESIA

A condition when there is persistent nociception and pain that lasts longer than the anticipated time for tissue repair or the resolution of the underlying disease process is referred to as "chronic noncancer pain." 31 There is growing recognition that patients with chronic

pain are undertreated and that opioids, in concert with other nonopioid modalities, play a key role in the therapy of chronic pain. 32 Evidence gathered by the World Health Organization in 15 primary care locations throughout Asia, Europe, Africa, and the Americas revealed that functional impairment, anxiety, and depression are connected with chronic pain in 5.5% to 33% of patients. 33 Despite a paucity of data to back it, doctors are nevertheless very concerned about patients using opioids for chronic pain developing addiction. One of the biggest barriers to using opioids for chronic nonmalignant pain, according to a survey of general practise doctors in California, was worry of reliance.[34]

MYTHS REGARDING THE MANAGEMENT OF PAIN: COMPETENCE AND INFORMED CONSENT

Misconceptions among doctors regarding their abilities and having given informed consent, I'm convinced that therapy of suffering will impair patients' judgement capacity, resulting frequently in the withholding of until agreement, pain medication, commonly after surgery is acquired. A legal requirement known as "competence" is determined by the courts, with state-specific bases. To declare The procedure for getting willing consent for Medical intervention presupposes proficiency and requires proof that at the time of acquisition consent, the patient must demonstrate that he or she: (1) is aware of the circumstances surrounding the decision; (2) is aware of the dangers involved; and (3) has communicated the decision. The majority of states have created requisites for the proof of informed consent based on the law or precedent.

The notion that the The use of may impact a person's capacity to provide informed consent.

The use of opioid analgesics to treat pain has faced opposition from. Two ED studies show that patients maintain their having the capacity to provide informed consent notwithstanding the effects of analgesics.43,44 The majority of hospitals have management rules that permit the use of narcotic painkillers in patients who require surgical intervention. Generally speaking, these are respected in the breach. In light of bioethical considerations, Dr. Gail Van Norman notes the following. Patients may feel under pressure to provide their assent when painkillers are withheld in order to get the medication they need to feel better. In some cases, premedication may improve a patient's capacity for decision-making by providing.

MANDATED CHANGES IN INSTITUTIONAL PRIORITIES

The Joint Commission for the Accreditation of Healthcare Organizations has imposed regulatory measures as a result of the profession's failure to address this issue. These measures include standards for the evaluation of pain and provisions for harsh financial penalties for healthcare organisations that fail to meet them. The implementation of pain management measures across all departments is mandated by these standards, and they must be given top attention. These must include patient and provider on-going education, pain assessment during hospitalisation, pain management in discharge planning, and progress-tracking quality monitoring initiatives. 47,48 It is believed that these required institutional adjustments will enhance patient outcomes and pain management procedures.

PAIN RESEARCH IN THE ED SETTING

There haven't been many clinical studies related to emergency care practise on which to base an evidence-based approach, despite the fact that there has been an explosion in analgesic research, as demonstrated by the more than 23,000 randomised, controlled trials listed in the Cochrane database. Finding data that is therapeutically applicable to the ED context while promoting controlled, randomised research in their own settings is a challenge for emergency physicians. 51

There is evidence that the specialty of emergency medicine is up to the task of pain management research. Only 60 articles were found when the terms "pain" and "emergency medicine," "emergency department," or "emergency medical services" were combined in a MEDLINE search of the literature between 1990 and 1996. 52 A similar search of papers from June 2001 that was restricted to controlled clinical investigations turned up over 300 studies.

CHALLENGES OF THE STUDY OF THE EFFICACY OF PAIN RELIEF

Pain perception and intensity seem to vary widely from person to person. Some people experience significant pain relief by placebo, while others need high dosages of narcotics. Military surgeons have long been aware that certain combat-wounded soldiers do not require morphine for pain management.[53] We have all seen individuals with acute fractures who don't seem to be in pain or who say they are in pain only when prodded. Studies on animals have revealed genetic variations that control how different types of pain are felt. 54 There has been a rise in interest in research on the genetics of pain, and federal funding is now available

for this kind of study. 55 This kind of research may eventually offer improved instruments for assessing patients who are in pain in a clinical context and assist in de-stigmatizing people who appear to be experiencing pain that is out of proportion to what one "should experience." [56]

DISCUSSION

Legal experts predict that increased medical-legal pressure to adequately treat pain will result from a combination of public awareness of a right to pain relief and written established standards as proposed by the Joint Commission for the Accreditation of Healthcare Organizations and the Agency for Healthcare Research and Quality. According to one expert, up until recently, malpractice claims were discouraged, especially when undermedicating patients due to the relatively inexperienced practise of pain management among healthcare professionals. State pain regulations, accreditation standards, and clinical practise guidelines all show that a significant change is about to occur as pain management becomes a recognised medical practise. 100 Tort liability can now be based on the convergence of medical management norms, according to another expert. This convergence in medical practise can be reflected in it, and it can also amplify the message so that providers hear it and adjust their practises accordingly.

The negative and positive effects of strict regulatory oversight of medical practise will be brought by organisations. They will also encourage desperately needed reform. To modify practise, considerable changes in medical education will be required, as well as intense quality-management monitoring of procedures and institutional expectations of change. Practices for ED quality management that prioritise pain management, set treatment protocols, evaluate practise outcomes, and give ongoing feedback and education do result in changes in the attitudes and behaviours of healthcare professionals. Such adjustments significantly enhance patient satisfaction and pain management.

REFERENCES

1. Marks RM, Sachar EJ. Undertreatment of medical inpatients with narcotic analgesics. *Ann Intern Med.* 1973;78:173-181.
2. Porter J, Jick H. Addiction rare in patients treated with narcotics. *N Engl J Med.* 1980;302:123.

3. Jamison RN, Raymond SA, Slawsby EA, et al. Opioid therapy for chronic noncancer back pain: a randomized prospective study. *Spine*. 1998;23:2591-2600.
4. Nourjah P. National Hospital Ambulatory Medical Care Survey: 1997 emergency department summary. *Adv Data*. 1999;304:1-24.
5. Tanabe P, Buschmann M. A prospective study of ED pain management practices and the patient's perspective. *J Emerg Nurs*. 1999;25:171-177.
6. Guru V, Dubinsky I. The patient versus caregiver perception of acute pain in the emergency department. *J Emerg Med*. 2000;18:7-12.
7. Lewis LM, Lasater LC, Brooks CB. Are emergency physicians too stingy with analgesics? *South Med J*. 1994;87:7-9.
8. Wilson JE, Pendleton JM. Oligoanalgesia in the emergency department. *Am J Emerg Med*. 1989;7:620-623.
9. Selbst SM, Clark M. Analgesic use in the emergency department. *Ann Emerg Med*. 1990;19:1010-1013.
10. Friedland LR, Pancioli AM, Duncan KM. Pediatric emergency department analgesic practice. *Pediatr Emerg Care*. 1997;13:103-106.
11. Jantos TJ, Paris PM, Menegazzi JJ, et al. Analgesic practice for acute orthopedic trauma pain in Costa Rican emergency departments. *Ann Emerg Med*. 1996;28:145-150.
12. McGrath PJ, Frager G. Psychological barriers to optimal pain management in infants and children. *Clin J Pain*. 1996;12:135-141.
13. Tuttle CB. Drug management of pain in cancer patients. *Can Med Assoc J*. 1985;132:121-134.
14. Alexander J, Manno M. Underuse of analgesia in very young pediatric patients with isolated painful injuries. *Ann Emerg Med*. 2003;41:617-622.
15. Petrack EM, Christopher NC, Kriwinsky J. Pain management in the emergency department: patterns of analgesic utilization. *Pediatrics*. 1997;99:711-714.
16. Brown JC, Klein EJ, Lewis CW, et al. Emergency department analgesia for fracture pain. *Ann Emerg Med*. 2003;42:197-205.
17. White LJ, Cooper JD, Chambers RM, et al. Prehospital use of analgesia for suspected extremity fractures. *Prehosp Emerg Care*. 2000;4:205-208.

18. McEachin CC, McDermott JT, Swor R. Few emergency medical services patients with lower-extremity fractures receive prehospital analgesia. *Prehosp Emerg Care.* 2002;6:406-410.
19. Vassiliadis J, Hitos K, Hill CT. Factors influencing prehospital and emergency department analgesia administration to patients with femoral neck fractures. *Emerg Med.* 2003;14:261-266.
20. Drayer RA, Henderson J, Reidenberg M. Barriers to better pain control in hospitalized patients. *J Pain Symptom Manage.* 1999;17:434-440.
21. Choiniere M, Melzack R, Girard N, et al. Comparisons between patients' and nurses' assessment of pain and medication efficacy in severe burn injuries. *Pain.* 1990;40:143-152.
22. Harrison A. Comparing nurses' and patients' pain evaluations: a study of hospitalized patients in Kuwait. *Soc Sci Med.* 1993;36:683-692.
23. Portenoy RK, Kanner RM. Patterns of analgesic prescription and consumption in a university-affiliated community hospital. *Arch Intern Med.* 1985;145:439-441.
24. McNamara RM, Rousseau E, Sanders AB. Geriatric emergency medicine: a survey of practicing Emergency Physicians. *Ann Emerg Med.* 1992;21:796-801.
25. Vilke GM, Marino A, Iskander J, et al. Emergency department patient knowledge of medications. *J Emerg Med.* 2000;19:327-330.
26. Hauswald M, Anison C. Prescribing analgesics: the effect of patient age and physician specialty. *Pediatr Emerg Care.* 2001;13:262-263.
27. Core Content Task Force II, Hockberger RS, Binder LS, Graber MA. The model of the clinical practice of emergency medicine [The American Board of Emergency Medicine Web site]. Available at: <http://www.abem.org>. Accessed September 1, 2003.
28. Spedding RL, Harley D, Dunn FJ, et al. Who gives pain relief to children? *J Accid Emerg Med.* 1999;16:261-264.
29. Chan L, Verdile VP. Do patients receive adequate pain control after discharge from the ED? *Am J Emerg Med.* 1998;16:705-707.
30. Jones JB. Assessment of pain management skills in emergency medicine residents: the role of a pain education program. *J Emerg Med.* 1999;17:349-354.

31. Use of opioid analgesics for the treatment of chronic noncancer pain: a consensus statement and guidelines from the Canadian Pain Society [Pain Research and Management Web site]. Available at: http://www.pulsus.com/Pain/03_04/opio_ed.htm. Accessed September 1, 2003.
32. Mitka M. Experts debate widening use of opioid drugs for chronic nonmalignant pain. *JAMA*. 2003;289:2347-2348.
33. Gureje O, Von Korff M, Simon GE, et al. Persistent pain and well-being: a World Health Organization Study in Primary Care. *JAMA*. 1998;280:147-151.
34. Potter M, Schafer S, Gonzalez-Mendez E, et al. Opioids for chronic nonmalignant pain: attitudes and practices of primary care. *J Fam Pract*. 2001;50:145-151.
35. Attard AR, Corlett MJ, Kidner NJ, et al. Safety of early pain relief for acute abdominal pain. *BMJ*. 1992;305:554-556.
36. LoVecchio F, Oster N, Sturmman K, et al. The use of analgesics in patients with acute abdominal pain. *J Emerg Med*. 1997;15:775-779.
37. Pace S, Burke TF. Intravenous morphine for early pain relief in patients with acute abdominal pain. *Acad Emerg Med*. 1996;3:1086-1092.
38. Kim MK, Strait RT, Sato TT, et al. A randomized clinical trial of analgesia in children with acute abdominal pain. *Acad Emerg Med*. 2002;9:281-287.
39. Graber MA, Ely JW, Clarke S, et al. Informed consent and general surgeons' attitudes toward the use of pain medication in the acute abdomen. *Am J Emerg Med*. 1999;17:113-116.
40. Wolfe JM, Lein DY, Lenkoski K, et al. Analgesic administration to patients with an acute abdomen: a survey of emergency medicine physicians. *Am J Emerg Med*. 2000;18:250-253.