Perspective

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Alleviating Suffering 101 — Pain Relief in the United States

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The magnitude of pain in the United States is astounding. More than 116 million Americans have pain that persists for weeks to years. The total financial costs of this epidemic are $560 billion to $635 billion per year, according to Relieving Pain in America,¹ the recent report of an Institute of Medicine (IOM) committee that we cochaired. And these figures don't include pain in children or people in long-term care facilities, the military, or prison. The annual U.S. expenditures related to pain (including direct medical costs and lost wages) are higher than those for cancer, heart disease, and diabetes combined. They include nearly $100 billion annually from state and federal budgets. Yet the treatment covered by these expenditures doesn't fully alleviate Americans' pain. Indeed, our committee reviewed the scientific and clinical evidence, held public workshops, received testimony from more than 2000 Americans, commissioned a review on pain's economic burden, and concluded that relieving acute and chronic pain is a significant overlooked problem in the United States.

Major impediments to relief include patients' limited access to clinicians who are knowledgeable about acute and chronic pain — owing in part to the prevalence of outmoded or unscientific knowledge and attitudes about pain. Fundamental differences in views about pain and its management pervade the medical profession. Some physicians over-prescribe medications including opioids, while others refuse to prescribe them at all for fear of violating local or state regulations. More than 65% of nursing home residents report having inadequately treated pain, which suggests that the impact of ineffective pain management could increase dramatically as the population ages. Decisions about medical care are also influenced by insurance coverage that may be preferential for injections, infusions, procedures, and surgery over the physical therapy, rehabilitation, or other more comprehensive approaches to pain control that may benefit patients more. Physicians' referral of patients to other health care professionals, including nurses, chiropractors, and practitioners of complementary medicine, and patients' willingness to seek such care, can be influenced by bias, unclear data, and the availability of care. Sadly, many people with chronic pain see physicians as “poor listeners.”

Differences in expectations and outcomes related to genetic makeup, age, race, and sex, as well as social and cultural mores, influence people's approach to pain relief. Many people with chronic pain simply don't know where to go for help, and when they do seek help, they may become frustrated, disappointed, or angry be-

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### Relieving Pain in America: Underlying Principles Guiding the IOM Committee

- Effective pain management is a moral imperative, a professional responsibility, and the duty of people in the healing professions.
- Chronic pain has a distinct pathologic basis, causing changes throughout the nervous system that often worsen over time. It has significant psychological and cognitive correlates and can constitute a serious, separate disease entity.
- Pain results from a combination of biologic, psychological, and social factors and often requires comprehensive approaches to prevention and management.
- Given chronic pain’s diverse effects, interdisciplinary assessment and treatment may produce the best results for people with the most severe and persistent pain problems.
- Chronic pain has such severe effects on all aspects of a person’s life that every effort should be made to achieve both primary prevention (e.g., surgery) and secondary prevention (of the transition from the acute to the chronic state) through early intervention.
- Although there is much more to be learned about pain and its treatment, even existing knowledge is not always used effectively, and thus substantial numbers of people suffer unnecessarily.
- The committee recognizes the serious problem of diversion and abuse of opioid drugs and questions about their long-term usefulness; it believes, however, that when opioids are used as prescribed and are appropriately monitored, they can be safe and effective, especially for acute, postoperative pain, procedural pain, and patients near the end of life who desire more pain relief.
- The effectiveness of pain treatments depends greatly on the strength of the clinician–patient relationship; pain treatment is never about the clinician’s intervention alone, but about the clinician and the patient (and family) working together.
- Many features of the problem of pain demand public health approaches — the large numbers of people affected, disparities in occurrence and treatment, and the goals of prevention. Public education can counter myths, stereotypes, and stigma that hinder better care.

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cause of its limited effects or practitioners’ perceived insensitivity. Perceptions about pain can be reinforced or shattered by responses from relatives and friends that range from compassion to the advice to “just suck it up.” Often, an initially supportive community becomes intolerant or inattentive as pain persists, which leads many people with chronic pain to give up, resulting in depression.

Given these and other factors, our committee concluded that “to remediate the mismatch between knowledge of pain care and its application will require a cultural transformation in the way clinicians and the public view pain and its treatment. Currently the attitude is often denial and avoidance. Instead, clinicians, family members, employers, and friends inevitably must rely on a person’s ability to express his or her subjective experience of pain and learn to trust that expression, and the medical system must give these expressions credence and endeavor to respond to them honestly and effectively.”

To guide its development of recommendations to address the public health problem of pain, the IOM committee established several underlying principles (see box). One is the importance of education in facilitating the requisite cultural transformation. Current U.S. initiatives are limited, and many constituencies will need to be served if we are to make progress. Change must begin with education of the person who is in pain — and the recognition that a person’s beliefs about pain (including concerns about discussing it with clinicians) can substantially affect outcome. The experience can be improved if patients are educated about pain and its consequences and enabled to play a more active role in managing their own pain.

The enhancing effect of public education is evident in campaigns concerning low back pain in Australia, Scotland, Norway, and Canada. Fact-based public education has also made a clear difference in other areas of health, altering behavior related to tobacco use, cancer, and Alzheimer’s disease. Deploying similar strategies for communicating health messages to the public can expand our understanding of how to effectively manage common causes of pain, set public expectations about available resources, and provide guidance regarding treatments to be sought or avoided. Such information is empowering for patients and their families, friends, employers, and communities.

A major challenge is the limited education that U.S. medical students and physicians receive about pain. At the 2009 First National Pain Medicine Summit, 30 physicians’ organizations concluded that training in pain management was poor and did not lead to competency. Such training deficiencies pervade virtually every medical specialty but are most surprising in fields such as oncology, since pain management should be an important part of cancer care.

This educational limitation is evident early in training, as illustrated by a survey of 117 medical schools, some of which reported including in their curricula only a few educational sessions on pain. The deficiency carries over to professional education: half of primary care physicians report feeling only “somewhat prepared” to counsel patients about pain, and 27% feel “somewhat unprepared” or “very unprepared.” These defi-
PERSPECTIVE

Painful Inequities — Palliative Care in Developing Countries
Daniela Lamas, M.D., and Lisa Rosenbaum, M.D.

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When Artur, a former KGB agent in Ukraine, developed prostate cancer that metastasized to his bones, his pain grew so intense that he moved hours away from his family so they would not witness his suffering. “I don’t want them to see me cry,” he said. Lacking access to the opioid regimen that we in the United States depend on to treat the pain accompanying end-stage prostate cancer, Artur turned to what he had available: a bottle of liquor and a gun beneath his pillow.

For 27-year-old Vlad, the temptation to take his own life was irresistible. Unable to stand the pain from his metastatic brain cancer, Vlad tried to throw himself out a window. He survived, only to live 2 more years with intractable pain.1

While the global burden of cancer and other noncommunicable diseases grows, lack of funding remains an impediment to the dissemination of effective treatment. But whereas patients like Artur and Vlad might be unable to gain access to high-quality cancer care, opioids are easy to produce and cheap. Morphine, the World Health Organization—sanctioned first-line treatment for severe pain, costs pennies per dose to manufacture. Yet 80% of the world’s population, including more than 5 million patients with terminal cancer, lacks adequate access to pain treatment. In more than 150 countries, morphine is simply not available.2

“There isn’t a single government that couldn’t procure morphine if they wanted it,” says Meg O’Brien, who directs the Global Access to Pain Relief Initiative (GAPRI, a program of the Union for International Cancer Control and the American Cancer Society).

“But no one is demanding it.”

Physicians’ perceptions about palliation are at the root of the problem. Many physicians seem to believe that to discuss pain control is to admit defeat. This barrier is not unique to resource-poor countries. Even in the United States, whose palliative care movement has been under way for decades, many physicians were surprised when researchers showed that treating pain does not hasten death but, rather, prolongs survival.3

In many countries, physicians learn only about opiates’ side effects, not their potential benefits, hensive, population-level strategy for pain prevention, treatment, management, and research. The scope of the problems in pain management is daunting, and the limitations in the knowledge and education of health care professionals are glaring. But the medical community must actively engage in the necessary cultural transformation to reduce the pain and suffering of Americans.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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1. Painful Inequities — Palliative Care in Developing Countries

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