

Questioning the Right to Pain Relief and Its Role in the Opioid Epidemic

Mark D. Sullivan, MD, PhD, and Jane C. Ballantyne, MD, FRCA

Abstract

The new discipline of palliative care helped to establish the right to pain relief at the end of life and the necessity of using opioids to achieve that goal. Professional pain organizations followed the United Nations' model for universal human rights in their declaration of a universal right to pain management. Both palliative care and pain medicine specialties worked to establish pain as a legitimate focus of medical treatment separate from its association with disease. Pain intensity became the metric used to determine the need for treatment and the success of that treatment. Opioids were favored as the most reliable and feasible means to reduced pain intensity. The Harrison Act of 1914 restricted legitimate opioid use to that prescribed by medical professionals as analgesics. This legislation helped establish opioids as specific painkillers that had a distinct capacity to induce addiction. This understanding of opioids as having distinct and separable analgesic and addictive potential was challenged by the 1970s discovery of an endogenous opioid system, which integrates pain and reward functions to support survival. Our modern pain neurophysiology places the patient with pain in a passive position from which it makes sense to assert a right to pain relief. To prevent future opioid epidemics we need to abandon clinical outpatient use of pain intensity scores and redefine the medical necessity of pain treatment as less about the reduction of pain intensity and more about the capacity to pursue personally valued activities.

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Most accounts of the origins of the opioid epidemic in the United States point toward aggressive marketing by pharmaceutical companies, lax oversight by pharmacies and distributors, and inadequate regulation by federal agencies. But Purdue Pharma and other opioid manufacturers built their marketing of prescribers and their lobbying of regulators around concepts concerning the right to pain relief developed and refined over decades by the pain medicine and research communities. Pain was declared the “fifth vital sign” by professional pain organizations.¹ This issue was combined with a mandate for pain treatment in a “right to pain relief” in which patients were entitled to demand pain-relieving treatments, especially opioids, from clinicians. If we are to understand the roots of our ongoing opioid epidemic, bring this epidemic to an end, and prevent similar future epidemics, we must understand that the right to pain relief helped give rise to

the unprecedented prescribing of opioids for the treatment of chronic pain. This article will review the policy, clinical, scientific, and moral roots of the right to pain relief and provide some concrete proposals for unwinding this right and preventing further opioid epidemics.

POLICY ROOTS OF THE RIGHT TO PAIN RELIEF

The new discipline of palliative care helped to establish the right to pain relief at the end of life and the necessity of using opioids to achieve that goal.² Indeed, some equated the right to pain relief with the right to life itself. As stated by Kathleen Foley, “Providing [pain] relief is vital not only as an end in itself, but also to improve the patient’s prospects for survival. Pain can erode a patient’s willingness to continue treatment, even to live.” Foley went on to become a leading opponent of physician-assisted suicide, arguing that

From the Department of Psychiatry and Behavioral Sciences (M.D.S.) and Department of Anesthesiology and Pain Medicine (J.C.B.), University of Washington, Seattle.

palliative treatment could restore dignity and the will to live and was preferable to suicide and euthanasia.

In 1997, the US Supreme Court heard cases that posed questions related to the issue of hastening death in terminally ill patients: (1) Is there a constitutional right to assistance in suicide? and (2) Is the right to refuse lifesaving treatment the same as a right to receive assistance in committing suicide? The first question was addressed in the appeal of the Ninth Circuit Court's opinion on Washington's law (*Washington v Glucksberg*) and the second in the appeal of the Second Circuit Court's opinion on New York's law (*Vacco v Quill*).³ Although the court denied the right to assisted suicide in each case, the court was very clear that medication use with the primary intention of relieving pain and suffering, and with the patient's consent, should be strongly encouraged. Justice O'Connor specifically made this point: "A patient who is suffering from a terminal illness and who is experiencing great pain has no legal barriers to obtaining medication, from qualified physicians, even to the point of causing unconsciousness and hastening death." Here, pain relief was recognized as an adequate reason for a patient to die if the death was not explicitly intended. This is a very strong endorsement of the right to pain relief. However, the Court only addressed the right to pain relief in the context of palliative care for the dying.

It was Professor Michael Cousins of Australia who first declared that not just palliative care, but pain relief itself, was a basic human right. In his 1999 Rovenstine Memorial Lecture,⁴ he wrote:

In 1948, the United Nations Declaration of Human Rights said that 'all persons are equal in dignity and rights and have the right to life, liberty and security....' Interestingly, the United Nations Declaration does not mention pain relief as being a human right. However, I ask you just to ponder what would be your priority list for basic human rights.

In 2004, a "Global Day Against Pain" was launched by the World Health Organization, in partnership with the International Association for the Study of Pain (IASP) and the European Federation of IASP Chapters. The theme of this global day was "Pain Relief: A Universal Human Right." Cousins, with colleagues Frank Brennan and Daniel Carr, published an editorial on this theme in the IASP's journal *Pain*⁵:

Failure to provide relief when this is available is a form of abandonment. In extreme cases it could be regarded as 'torture by omission'.....The bioethical principle of justice can be used to assess the massive humanitarian and financial costs of severe pain and to argue to pain relief as a high social priority. A virtue ethics approach also places pain as a high priority. The current lack of a strong application of these principles to pain relief raises questions about the ethical foundations of current healthcare.

Cousins went on to spearhead an initiative at the IASP to write a declaration that the provision of pain management should be considered a fundamental human right. The Declaration of Montreal: Declaration That Pain Management Is a Fundamental Human Right was drafted in 2010 and later approved by the IASP Council and published in 2011. This declaration changed the focus from *pain relief* to *pain management*. By 2007, alarming increases in prescription opioid abuse admissions and death rates were noted in the United States,⁶ so when the Declaration of Montreal was being written in 2010, there was caution about promoting opioids. The document itself was careful to promote neither access to pain relief nor opioids but instead access to pain management. To pain specialists, pain management meant multidisciplinary pain care that included medical, psychological, and social interventions, but it did not mean much to primary care professionals, who had access to few pain management techniques beyond opioids.

CLINICAL ROOTS OF A RIGHT TO PAIN RELIEF: DELINKING PAIN FROM DISEASE

Palliative care played an important role in the policy roots of a right to pain relief through its framing of pain relief as a preferred alternative to assisted death among terminally ill patients. It also played a role in the clinical roots of a right to pain relief because it broke the link between pain relief and disease control. A central teaching in 20th century medicine subordinated pain relief to disease control. The physician's first responsibility was to diagnose and treat the disease or injury. Pain relief was secondary. Cicely Saunders and other pioneers of palliative care argued that medical responsibility did not end when disease could no longer be controlled. It extended to the relief of pain and suffering. Pain itself was a legitimate target of medical attention and therapy.⁷

This delinking of pain and disease would play a crucial role in the extension of the right to pain relief from the care of patients with cancer pain at the end of life to the care of those with chronic noncancer pain in the middle of life. As recently as the 1980s, it was common in primary care to distinguish between explained pain that had a clear relationship with the nociception produced by disease or injury and unexplained pain that did not have this clear relationship.⁸ Pain that could not be explained by its association with disease was explained as psychogenic or as the product of the somatization of psychosocial distress.⁹ Unexplained or psychogenic pain was not considered a fully legitimate medical problem with a clear medical treatment, so patients were often reassured about the absence of causal disease and sent home to manage it on their own.

The 1979 IASP definition of pain opposed this dichotomization of pain into explained and unexplained. It read: "An unpleasant sensory and emotional experience associated with actual *or potential* tissue damage, *or described* in terms of such damage." Although the association of pain with tissue damage plays a prominent role in this definition, it is qualified in important ways. Pain is not simply associated with tissue damage (as Descartes had argued 3

centuries before) but "with actual *or potential* damage, *or described* in terms of such damage" (emphasis added). The note accompanying the definition begins with this crucial point: "Pain is always subjective."¹⁰

The 2020 revision of the definition has changed a few details of the definition and the notes, but it has not changed the emphasis on the subjective nature of pain and its loose relationship with tissue damage. This definition has validated patients' report of pain and undercut the dismissal of pain without a clear association with tissue damage. This meant that chronic pain was real pain. Clinicians were taught to believe and respect patients' reports of pain, even if no medical cause could be found. The danger was that for physicians who did not know what else to do, this respect often took the form of a prescription for opioids.

With the acceptance of pain as a subjective experience, palliative and pain specialists turned to measures of pain intensity, such as the 0 to 10-point numerical rating scale, to determine the need for treatment of patients' pain problems and the success of that treatment. Pain treatment was equated with the reduction of a pain intensity score. Palliative care and cancer pain specialists urged a "titrate-to-effect" approach to opioid dosing.¹¹ The correct opioid dose was the dose that lowered the pain intensity score. The right to pain relief came to be interpreted as the right to a lower pain score.

SCIENTIFIC ROOTS OF THE RIGHT TO PAIN RELIEF: OPIOID SPECIFICITY

In the 18th century, opium was widely used for cholera, dysentery, and cough and was also found useful for nervous disorders and insomnia. Indeed, opium was a benign alternative to the arsenics, mercuries, and other toxic treatments in use at the time, and it appeared successful in alleviating a remarkably wide range of ailments. By the 19th century, opium was used more broadly for pain, especially for the "female complaints" of hysteria and neurasthenia. This practice was criticized because neurasthenia was thought

to predispose women to opium addiction. Indeed, it is estimated that there were 150,000 to 200,000 opiate addicts in the United States in the late 19th century, most of whom were women.¹² The modern era of opiate prescribing began when morphine was synthesized in 1803, then sold commercially in 1827. The hypodermic needle and syringe were invented in the 1850s. Morphine was used widely in the American Civil War, and many soldiers returned home addicted to it. By the end of the 19th century, America was in the midst of its first opioid epidemic.

In the early 20th century, opioid addiction had become so widespread in the United States and Europe that it was believed to be necessary to restrict opioid use. In the United States, the Harrison Act was introduced in 1914 that for the first time made it illegal to produce, distribute, or use opioids and other addictive drugs other than by medical prescription.¹³ In one stroke, the Harrison Act passed the moral and ethical burden of the choice to use opioids to physicians. Legitimate opioid use occurred only when opioids were prescribed by doctors for pain control. Illegitimate opioid abuse occurred when people took unprescribed opioids for any reason, but especially for nonmedical mood manipulation. The Harrison Act and its amendments enshrined in US policy an understanding of opioids as painkillers that, if misused, could be addictive. Treatment of pain with opioids was regulated but allowed in medical practice, although opioid treatment of addiction was not.¹⁴

Although opioid regulation was updated in the 1970 Controlled Substances Act to allow methadone maintenance treatment of addiction, opioid policy remained framed in Harrison Act terms as a balancing of the benefits of pain relief with the risks of addiction. Continuous opioid exposure results in tolerance to opioid effects and opioid dependence. Opioid dependence produces withdrawal symptoms when opioids are withdrawn but is strongly distinguished in current diagnostic systems from opioid use disorder and opioid addiction. Physical

dependence is seen as an inevitable result of continuous opioid exposure for analgesia, while addiction is not. During the years that opioid use grew exponentially, it was argued that pain protects patients from addiction to their opioid medications.¹⁵ This idea is now discredited, but it represents another important example of how the analgesia and reward provided by opioids were considered not only separable but opposed to each other.

This understanding of opioids as having distinct and separable analgesic and addictive potential has been challenged by the 1970s discovery of an endogenous opioid system.¹⁶ The endogenous opioid system consists of hormone-like mediators (endorphins and enkephalins) that act through receptors throughout the body but mostly in the brain and nervous system. Once it was understood that opioid drugs worked through people's own endogenous opioid systems, it gradually became clear that the pain-relieving and rewarding effects of opioid drugs are not distinct and separate but are integrated and interdependent means of promoting survival.¹⁷

This integration is important because it means that, in clinical practice, physical and emotional pain control cannot be so neatly divided.¹⁸ Opioid use, whether licit or illicit, could be chosen for the treatment of bodily pain, but even if this is the reason that opioids are chosen, opioids do not simply target bodily pain. Opioid medications affect a wide range of survival mechanisms and produce wide-ranging neuroadaptations over time. These changes alter people's stress responses, mood, energy, and drive and thereby alter people's behaviors. With long-term use, these changes may not differ greatly between patients with pain and people using opioids illicitly.^{19,20} Although regulations try to draw a line between prescribed and nonprescribed opioid use, this line cannot separate intended from unintended opioid functions within the brain.

The endogenous opioid system, as an evolved human brain system, is focused on survival.²¹ The multiple functions of the endogenous opioid system, such as relief of

pain and rewarding of survival behaviors—including feeding, mating, and social bonding, to name just a few—are all necessary for human survival. Other nonmammalian species have rudimentary endogenous opioid systems focused on pain control, but these systems are primitive compared with the human system. None of these other systems are as complex nor as involved in complex socialization as in humans, for whom survival depends on social networking.²²⁻²⁴

There are diverse human endogenous opioid functions encompassing not only pain and reward but appetitive behaviors of many types, neuroendocrine and reproductive functions, and balancing the stress response with the need to restore and rebuild after stress relents. However, our popular and clinical understanding of opioids is as painkillers that can take pain away but leave the person alone. This idea of opioid specificity, inherited from the Harrison Act, has supported the extension of a right to pain relief from cancer pain care to chronic noncancer pain care.

SCIENTIFIC ROOTS OF RIGHT TO PAIN RELIEF: PHYSIOLOGIC MECHANISMS OF PAIN

Whereas medieval pain was interpreted as a sign of sin, contemporary pain tends to be interpreted as a sign of the absence of sin because it is understood as a mechanical product of impersonal forces. Tissue damage produces specific nociceptive activity in the nervous system that is transmitted from the injured body part to the brain, where it is received and perceived. Descartes described the essentials of this mechanical model in 1664.²⁵ Descartes' model has been investigated extensively and modified in the nearly 400 years since it was proposed. It has been directly and explicitly challenged by the past 50 years of pain research. However, crucial elements of this model have been preserved, most especially the mechanical elements that support the moral model of pain as undeserved suffering. We argue that this model of pain as passive and innocent suffering must be challenged if we are to end our

current opioid epidemic and prevent a future opioid epidemic.

Descartes understood the nervous system, including the brain, as a mechanical operation. But as a mechanical operation, it could not perceive or know anything. For Descartes, these “knowing” functions were part of the immaterial mind, which communicated with the brain through the pineal gland. We now reject Descartes' dualism out of hand, believing that there is no immaterial *res cogitans* mind lurking above or beyond the brain. There is only the brain. So, we think, this brain must be where pain perception occurs. However, there is a serious problem with this commonsense view. If nociceptive information is transmitted from the periphery to the center where it is perceived as pain, where is this center? This center has been named the *pain matrix* and usually includes the thalamus, somatosensory cortex, cingulate gyrus, and insula, among other centers. The difficult question is how do these brain centers turn nociception into pain?

All these dualisms separate a passive receptive phase and a more active interpretive phase in pain perception. They allow us to preserve our mechanical model of nociception by pushing the difficult conversion of nociception into pain into some obscure corner of the brain. They separate the *mechanisms* of pain from the *meanings* of pain. Mechanical causation is impersonal (occurs inside the body but outside the person) but imposes an aversive experience of pain on the person who is seen as passive in this process. Fifty years after the perceptive function of the pain matrix was proposed, we are no closer to clarifying the mechanism by which nociception is translated into pain. We don't know how to bridge the gap between impersonal mechanical nociception and personally meaningful pain. The gate control theory of pain proposed in 1965 taught us that nociception is continuously modulated as it travels from receptors to the brain, but it still saw pain as beginning with nociception.²⁶ Psychological processes continue to be seen to play a role in reacting to and modulating pain but not in causing it.²⁷

MORAL ROOTS OF A RIGHT TO PAIN RELIEF: PASSIVITY AS INNOCENCE

Mechanical pain is imposed on a person who has done nothing to cause or deserve it. This is clearest in the case of acute pain due to injury, but it is also thought to be true of chronic pain, whether it is nociceptive (eg, osteoarthritis), neuropathic (eg, diabetes), or nociplastic (eg, fibromyalgia) in origin. In each case, the initiating cause of pain is outside the person, even if it is inside the body. This cause can be in nonnervous tissue, peripheral nerves, or the central nervous system. Because this pain originates outside the person, it is outside the person's responsibility. Patients do not control knee cartilage degeneration, metabolic damage to nerves in their feet, or altered patterns of sensitivity and perfusion in their brain's limbic system. Patients themselves are passive with respect to these causes of pain. Mechanical pain is therefore interpreted as a form of innocent suffering for which it is appropriate to claim a right to relief.

The mechanical medical model separates the source of the pain from the person and treats it as inessential, avoidable, or reversible suffering. This view stands in contrast to the medieval religious model of pain, which saw it as the unavoidable destiny of humans due to original sin. This essential pain could not be avoided, only understood and tolerated, because it was an inextricable part of human existence. The modern medical approach to pain is strikingly different: if the cause of the pain can be removed, why not remove it? This hope supports not only back surgery but opioid therapy for back pain. That is why we call opioid analgesics *painkillers*. Patients demand painkillers because they want a medication that takes away their pain but leaves them (as persons) alone. Although religion advised personal transformation through prayer and sacraments to deal with pain, medicine absolves us of the need for personal transformation. Instead, we need only seek and accept treatment.

If the treatment cannot remove the source of the pain or cure the pain process, the medical framing of the pain as curable

or avoidable begins to break down. Patients are left to cope with pain the best they can, or they are trained in cognitive-behavioral self-management skills such as pacing, relaxation, stretching, and pleasant activity scheduling. Although these skills may reduce the suffering and disability associated with chronic pain, they do not fulfill the promise of the medical model to take the pain away while leaving the person alone. They therefore do not directly meet the demand of a right to pain relief. The biopsychosocial model of pain was well established before opioid prescribing rapidly increased in the 1990s but proved to be powerless to stop the surge in opioid use.

It is instructive to contrast our approaches to physical pain and emotional pain. A right to relief is not claimed for less medical and more personal forms of suffering, such as anxiety, depression, grief, or loneliness, because the person is implicated in both the causation and relief of these conditions. Anxiety and depression, when approached as psychiatric disorders, may be understood as having neurochemical mechanisms, but few clinicians or patients accept these mechanisms as a complete account of fear and despair in human life. These forms of emotional pain are too woven into daily life, too linked with the meaning of actions and interpersonal relationships, to be accepted as fully mechanical. Love, grief, and loneliness are undoubtedly grounded in brain processes, but that is not where we look for their cause and their meaning.

UNWINDING THE RIGHT TO PAIN RELIEF AND ITS DISTORTION OF CHRONIC PAIN CARE

Sometimes chronic pain can be cured, but more often it cannot. It is often a process that requires reaching inside oneself to change, not just beliefs and behaviors but even one's identity.²⁸ We have oversimplified chronic pain by depersonalizing its assessment and treatment. This implies that we can reduce or eliminate chronic pain without changing the person with the pain. The great promise of the biomedical model

as applied to chronic pain is that this pain is inessential suffering that can be safely and expeditiously eliminated. It promises that chronic pain can be killed with pills or procedures while leaving the person untouched. This promise is one of the deep roots of our opioid epidemic. We therefore propose a set of reforms, encompassing our understanding of both opioids and pain.

Abandon Clinical Outpatient Use of Pain Intensity Scores

The 0 to 10—point pain intensity scale that has become a familiar feature of clinical care had its origin in experimental psychophysics studies that investigated the relationship between noxious stimulus intensity and experienced pain intensity. In acute postoperative care, this scale may have improved pain control in the days immediately following surgery. In palliative care and cancer pain care, the scale was combined with the titrate-to-effect opioid dosing principle to aggressively target pain levels in seriously ill patients with poor prognoses. Cancer pain treatment in the 1980s was simpler because of its clear origin in progressive tissue destruction and short time frame of treatment at the end of life. However, the pain intensity scale began to seriously distort clinical pain care when it was extended to the outpatient care of patients with chronic noncancer pain. This 0 to 10 pain intensity metric neglects important aspects of pain (eg, meaning, extent, constancy), isolates pain and its treatment from their effect on the patient's life, and selects high-risk patients for the riskiest opioid regimens.²⁹ Although these scores have been repeatedly found to not improve chronic pain care as was hoped, they continue to be used in most health care systems. We believe these scores should be phased out in favor of more personalized and qualitative measures, applied only when pain is the focus of clinical care.

Redefine the Medical Necessity of Pain Treatment

The medical necessity of pain treatment should be determined by the effects of the

pain, not by its intensity or its causes. This view conflicts with the usual way we demarcate medical problems from nonmedical problems in our society. Classically, medical problems consist of diseases or injuries causing symptoms, but a causal disease often cannot be identified for chronic pain. Thus, we can't understand the medical necessity of pain treatment if we stay locked into the disease vs symptom thinking typical of the biomedical model. Chronic pain is neither a disease nor just the symptom of another disease. That is what makes it complicated.

To move forward with chronic pain care, we must break out of the “pain as symptom or disease” dichotomy. As pioneering pain psychologist Bill Fordyce used to say, chronic pain is “transdermal.” It has causes inside the body and outside the body.²⁷ With his focus on the modification of pain behavior, Fordyce also taught us that treating the functional impairments produced by pain is one way to treat the pain itself.³⁰ One of the principal benefits of pain treatment is reducing or eliminating the functional deficits caused by pain. It is these deficits that determine the medical necessity of pain treatment as balanced against the deficits induced by the pain treatment itself.

Redefine the Necessity to Provide Opioids for Pain

Only through clear criteria for the medical necessity of pain treatment can we find a way to reconcile the simultaneous claims of opioid overprescribing and underprescribing found in the professional and popular literature.^{15,31,32} With 5% of the world's population, the United States prescribes 80% of the opioids.³³ What is the proper amount of opioid prescribing? Opioid prescribing in the United States has declined since 2012 but still remains at least double that in 1999. In 2020, prescription opioids remained the most commonly misused prescription drug in the United States. Among those reporting opioid misuse during the past year, 65% reported the main reason for their most recent misuse was to “relieve physical pain” compared with 11% to “feel good or get high.”³⁴ Opioid prescribing is

driven by an array of medical and nonmedical features of a patient's environment. Rates of manual labor, unemployment, and high school graduation all have associations with opioid prescribing.³⁵ Prescribing rates vary considerably among different physicians in the same emergency department.³⁶

Determining the proper level of opioid prescribing is complex for many reasons. Among patients prescribed opioids for low back pain without significant evidence of opioid misuse in the past year, daily opioid use was prompted as strongly by negative emotions as by pain and provided relief of both negative emotions and pain. Among participants at high risk for opioid misuse, pain but not negative emotions was associated with higher opioid doses.³⁷ This issue defies our standard understanding of prescription opioid use for physical pain as proper use and prescription opioid use for negative emotions as improper abuse. Distressed patients feel both negative emotions and localized pain. They use and abuse opioids for both afflictions.

Pharmaceutical marketing and professional treatment guidelines have all urged opioid prescribers to focus on the treatment of patients with physical pain rather than the treatment of those with emotional pain, as manifested in mental health and substance use disorders. These admonitions have failed completely. Patients with mental health and substance use disorders are more likely to be prescribed opioids, at higher doses, for longer periods of time.³⁸ Given the evolutionary history and complex purposes of the human pain system, it is simply not possible to aim prescription opioids at physical pain only and not at the whole of human suffering, nor to distinguish exactly which of these is being treated.

The solution is to limit opioid use to the short term. Opioids are powerful medications that can disrupt the many functions of the endogenous opioid system and of normal living. They are best used briefly and judiciously under close medical supervision, just as corticosteroids are currently used.³⁹ The use of opioids by licensed clinicians for the explicit purpose of providing chronic pain relief does not protect patients

from the iatrogenic harms of opioid dependence and opioid addiction. We cannot deliver only the analgesic functions of opioids by prescribing them in accord with an asserted right to pain relief.⁴⁰ Pain does not protect patients from the adverse effects of long-term opioid therapy.

CONCLUSION

When we argue that pain relief is a right, it implies that clinicians have a duty to provide this pain relief. Although we understand pain as a medical problem, medicine itself does not have effective solutions for all pain. The statement of a right to relief tends to lead to opioid prescribing because opioids are a form of pain relief that clinicians can deliver to patients. The assertion of a right to relief implies that the need for relief is urgent and that patients cannot participate in providing that relief for themselves. Because there is immediate necessity in the case of acute pain and pain associated with dying, such usage is widely supported, including by the US Supreme Court, but chronic pain does not call for a short-term solution, nor for a right to a treatment that is more likely to manifest serious risks when taken over the long term.

POTENTIAL COMPETING INTERESTS

Drs. Sullivan and Ballantyne are both unpaid board members of Physicians for Responsible Opioid Prescribing and both have been paid consultants in opioid litigation.

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Abbreviations and Acronyms: IASP, International Association for the Study of Pain

Correspondence: Address to Mark D. Sullivan, MD, PhD, Department of Psychiatry and Behavioral Sciences, University of Washington, Box 356560, Seattle, WA 98195 (sullimar@uw.edu; Twitter: @DrMarkDSullivan).

ORCID

Mark D. Sullivan:  <https://orcid.org/0000-0002-4396-6038>; Jane C. Ballantyne:  <https://orcid.org/0000-0003-3464-3525>

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