



The Fifth Vital Sign

In the e-mail she sent to me, she asked “So, Doc, how about if we do nothing for a little while?” My patient’s condition had declined in the months following her lumbar surgery. After receiving a prior epidural steroid injection that had provided her with several months of pain relief, she contacted me, stating, “I am able to cook dinner, do dishes, and go out at night. I went square dancing 2 times to date. I would say it is 80% better.” But my patient had wanted a permanent fix. Now, an unaccustomed burning pain was her constant companion. Within the same week, another patient, a young man who displayed the largest, most doleful eyes, told me, “The fourth ankle surgery was the biggest mistake I made. I am worse off now than I was before.”

THE FIFTH VITAL SIGN

Recognizing the widespread prevalence—and the undertreatment—of chronic pain, Dr. James Campbell, in his 1996 presidential address to the American Pain Society, stated, “if pain were assessed with the same zeal as other vital signs are, it would have a much better chance of being treated properly.”¹ The phrase “Pain [as] the 5th Vital Sign” (trademarked by the American Pain Society) was created to foster routine assessment of pain along with a patient’s traditional vital signs: pulse, blood pressure, temperature, and respiration. The VA enacted a national strategy to improve pain management in 1998.² This strategy

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included requiring providers to document the patient’s report of pain, as measured on a 0-to-10 Numeric Rating Scale (NRS), in the patient’s electronic medical record. It was also expected “that a pain score of 4 or higher would trigger a comprehensive pain assessment and prompt intervention.”³ Around the same time, the Joint Commission (formerly the Joint Commission on Accreditation of Healthcare Organizations) declared pain to be “The 5th Vital Sign.”⁴

HAS ASSESSING PAIN IMPROVED ITS MANAGEMENT?

A decade later, it is time to evaluate the effect of these initiatives on patients’ pain-related care. Has the assessment and documentation of a pain score resulted in improved pain management? One study, undertaken at a single VA clinic in Los Angeles, California, suggests otherwise. Mularski and colleagues retrospectively reviewed medical records to compare providers’ pain management before and after implementation of the initiative. They concluded: “we were unable to detect any improvements in evaluation and treatment of pain in the year after the P5VS (pain-as-the-5th-vital-sign) initiative was implemented at a single VA institution.”⁵ Vila and colleagues examined patient satisfaction with pain control and opioid-related drug reactions before and after implementation of a Numerical Pain Treatment Algorithm (NPTA). Patient satisfaction improved significantly after initiation of the NPTA, but was accompanied by a greater-than-two fold increase in adverse drug reactions to opioids due to oversedation.⁶

TREATING THE NUMBER, NOT THE PATIENT

It is my opinion that by repeatedly pressing patients for a pain score, we suggest that we are treating that number. I do not believe that this was the intent of the initiative but, rather, an unintended consequence. We have supported a culture in which pain is viewed as abnormal and always undesirable. We, the medical community, have promulgated the myth that we have a ready remedy to eliminate pain. Why else would we repeatedly ask the pain question if we did not have an answer? Whereas we routinely screen for diseases that have no easy cure, a notable difference exists in the case of pain. In typical screening, the provider attempts to detect conditions that are asymptomatic. In the case of persistent pain, the symptom is the disease, and the patient is ever aware of its tormenting presence. Pain is often all consuming, motivating patients to undergo trial treatments that have unproven efficacy. Furthermore, the adverse effects and sequelae of treatment may consequently leave patients worse off than before they pursued these therapies.

PILL OR PROCEDURES: BOTH OR NEITHER?

The long-term use of opioids, for example, is an ill-resolved issue. Uncomfortable adverse effects (such as constipation or sedation) abound, as does the potential for endocrine dysfunction, addiction and abuse, and the potential to increase pain through the curious phenomenon of opioid-induced hyperalgesia. Research indicates that opioids inhibit immune function.⁷ Given this knowledge,

should we recommend their long-term use? Ballantyne and Shin, in their review of the evidence, cautioned: “there is neither a strong history of success of opioids for chronic pain nor strong unchallenged expert opinion supporting the therapy.”⁸ According to a recent report issued by the CDC, the estimated number of emergency department visits involving nonmedical use of opioid analgesics increased 111% from 2004 to 2008, highlighting their potential for misuse.⁹

AN “INTERSUBJECTIVE” APPROACH TO MANAGING PAIN

I am not implying that we should abandon the assessment of pain, or that we should stop treating it altogether. I firmly believe that no one should have to endure unnecessary pain. I am, however, also of the opinion that no patient should be subjected to unnecessary—and potentially deleterious—care. I believe that we have evolved from undertreating pain to often suggesting misguided and inappropriate treatment, failing

recognition of the “intersubjective,” a place where numbers and stories converge.¹¹

Untreated, persistent pain affects multiple domains of a person’s life. Someone who experiences chronic pain is often unable to perform simple tasks of daily living or engage in pleasurable activities. Sleep, mood, and cognition often are affected. It is this pain-related experience that mandates action.

Implementing “Pain [as] the 5th Vital Sign” was an important landmark, but merely a first step. Providers need to educate patients that assessment using the NRS is only 1 part of a comprehensive biopsychosocial evaluation. In each case, the patient’s personal belief/value system should be taken into consideration while formulating a treatment plan and the consequences of untreated pain should be weighed against the risks of treatment. Patients should be encouraged to be active participants in their pain-related care.

I believe that we have evolved from undertreating pain to often suggesting misguided and inappropriate treatment, failing to acknowledge the limitations of the therapies prescribed.

Procedural interventions to relieve pain, such as epidural steroid injections, are generally safe, but also carry the possibility of adverse outcomes. These include nerve damage, spinal cord infarction, stroke, and paralysis. Surgery to treat pain is highly effective for specific conditions, such as joint replacement for severe osteoarthritis, and minimally effective for others, such as chronic low back pain without a clear cause. Drs. Don and Carragee alluded to this in their excellent, but sobering, summary published by the North American Spine Society in 2008. They wrote: “In addition to the uncertainty regarding the efficacy of surgery for chronic low back pain, it should also be noted that the potential harms and costs associated with these interventions are substantial.”¹⁰

to acknowledge the limitations of the therapies prescribed. The old-fashioned search for a cause has been replaced by knee-jerk symptom palliation as we chase the pain score in a dizzying tailspin. If patients have come to expect an opioid prescription whenever they report pain, we are to blame. We, the medical establishment, have created this iatrogenic monster.

Perhaps the biggest reason not to focus solely on the pain score is that we trivialize pain’s complexity by reducing it to a unidimensional number. We act as if we can stop paying attention to the story of suffering. Dr. Mark Sullivan, professor of psychiatry and behavioral sciences at the University of Washington in Seattle, has suggested a more integrative perspective. Sullivan advocates

IN CONCLUSION

Treating pain involves much more than checking a box, entering a numerical value, and dispensing a pill. Above all, the power of attentive listening and empathic witnessing of a patient’s suffering should not be discounted. ●

Author disclosures

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REFERENCES

1. American Pain Society. Principles of Analgesic Use in the Treatment of Acute Pain and Cancer Pain. 4th ed. Glenview, IL: American Pain Society; 1999.
2. Department of Veterans Affairs, Veterans Health Administration. Pain Management. VHA Directive 2009-053. October 28, 2009. <http://www1.va.gov/painmanagement/docs/VHA09PainDirective.pdf>. Accessed November 1, 2010.
3. Department of Veterans Affairs, Geriatrics and Extended Care Strategic Healthcare Group, National Pain Management Coordinating Committee. Pain as the 5th Vital Sign Toolkit. October 2000, rev ed. <http://www1.va.gov/painmanagement/docs/TOOLKIT.PDF>. Accessed April 27, 2010.
4. Dahl J. Implementing the JCAHO pain management standards. American Pain Society 19th Annual Meeting; November 2–5, 2000; Atlanta, GA.
5. Mularski RA, White-Chu F, Overbay D, Miller L, Asch SM, Ganzini L. Measuring pain as the 5th vital sign does not improve quality of pain management. *J Gen Intern Med*. 2006;21(6):607–612.
6. Vila H, Smith RA, Augustyniak MJ, et al. The efficacy and safety of pain management before and after implementation of hospital-wide pain management standards: Is patient safety compromised by treatment based solely on numerical pain ratings? *Anesth Analg*. 2005;101(2):474–480.
7. Sacerdote P. Opioid-induced immunosuppression. *Curr Opin Support Palliat Care*. 2008;2(1):14–18.
8. Ballantyne JC, Shin NS. Efficacy of opioids for chronic pain. A review of the evidence. *Clin J Pain*. 2008;24(6):469–478.
9. Centers for Disease Control and Prevention. Emergency department visits involving nonmedical use of selected prescription drugs—United States, 2004–2008. *MMWR Morb Mortal Wkly Rep*. 2010;59(23):705–709. <http://www.cdc.gov/mmwr/pdf/wk/mm5923.pdf>. Accessed August 11, 2010.
10. Don AS, Carragee E. A brief overview of evidence-informed management of low back pain with surgery. *Spine J*. 2008;8(1):258–265.
11. Carr DB, Loeser JD, Morris DB, eds. Why Narrative? Narrative, Pain and Suffering. Seattle, WA: IASP Press; 2005:9.