Letters

Invited Commentary

Pain and Opioids in the Military: We Must Do Better

In the documentary movie *Escape Fire,*[1] a battle-weary and combat-wounded soldier falls out of his bunk during a medical evacuation flight from Afghanistan to Washington, DC. Disoriented from an overdose of opioid and psychoactive medications previously prescribed for his wounds, pain, and loss, he later embarks on a journey of self-healing in an effort to get off of the drugs. Unfortunately, he is not alone. In a study by Toblin et al[2] of one of the Army's leading units published in this issue of *JAMA Internal Medicine*, 44.0% of the soldiers had chronic pain, and 15.1% regularly used opioids. Even accounting for the ready availability of military care, these rates are much higher than the estimates of 26.0% and 4.0%, respectively, in the general civilian population. While chronic pain and opioid use have been a long-standing concern of the military leadership, this study is among the first to quantify the impact of recent wars on the prevalence of pain and narcotic use among soldiers. The nation's defense rests on the comprehensive fitness of its service members—mind, body, and spirit.[3] Chronic pain and use of opioids carry the risk of functional impairment of America's fighting force.

In its landmark 2011 report *Relieving Pain in America,*[4] the Institute of Medicine (IOM) called for a comprehensive pain management plan with specific goals, actions, and timeframes. They recommended that the goal should be nothing short of a "cultural transformation" in how we manage pain, noting that over 100 million people experience chronic pain at an annual cost of over $600 billion. Notably, they urged a plan that tailored pain management to each person and that more and better strategies for "self-management of pain be promoted."[4(p3)]

A year before this IOM report, in response to the growing prevalence of pain from a decade of continuous combat, the Department of Defense (DoD) took up this challenge. The Army, joined by the other Services, the Veterans Administration, and leading civilian pain experts, established a Pain Management Task Force. The DoD developed a comprehensive Pain Management Campaign with 109 specific action items with an aim to create an integrated approach to pain that is "…holistic, multidisciplinary, and multimodal in its approach, utilizes state of the art/science modalities and technologies, and provides optimal quality of life for soldiers and other patients with acute and chronic pain."[5] This campaign has continued unabated within the DoD. For example, the Army has moved forward with a variety of initiatives to improve treatment effectiveness and risk reduction related to polypharmacy, among them those aimed at reducing adverse outcomes due to prescription abuse. These include informed consent for polypharmacy, a sole health care provider program for frequent prescription drug users, limiting the authorized use of a prescription to 6 months following the fill date, adding hydrocodone and hydromorphone to the panel in random urine drug testing, and polypharmacy education and training. Drug take-back programs at hospital and clinic pharmacies have begun improving medical oversight and improving health record documentation.

Among the first tasks needed to fully implement the IOM and DoD Pain Management Campaign recommendations was to examine the evidence basis for "self-management" strategies. The DoD commissioned Samueli Institute, a nonprofit research organization, to conduct a comprehensive set of systematic reviews on self-care and integrative approaches for pain. An expert committee called the Active Self-Care Therapies for Pain (PACT) Working Group was convened to make recommendations based on these reviews. The PACT included the director of the Defense and Veterans Center for Integrated Pain Management and 7 other subject matter experts. That PACT evidence review and recommendations were recently published in *Pain Medicine*.[6] From the available literature, the committee recommended that several self-care modalities be adopted as effective for alleviating chronic pain, including yoga, t'ai chi, and music therapy. More than 10 other self-management approaches had insufficient evidence to recommend them, primarily because of a lack of studies and poor research design. It was clear that much more investment was needed for understanding and delivering these modalities. But is that likely to happen?

Achieving the IOM and DoD recommendations will require overcoming major obstacles, especially where we are investing our money for pain management. Despite the public costs of inadequately managed pain listed by IOM, the National Institutes of Health currently spends only 1% of its $30 billion budget for pain research. Compare this with private sector spending on pharmaceuticals, estimated at $48.5 billion for research and development and $57.5 billion for drug promotion.[4] If only 1% of that is for pain, this amount dwarfs what goes into self-management. Although opioid medications are effective in treating acute pain, their use in chronic pain management is not well supported by the available evidence[7] and is associated with clinically significant adverse events. In the Research Letter by Toblin et al[2] in this issue, 44.1% of soldiers reporting opioid use had no or mild past-month pain, including 5.6% with no pain. As the authors point out,[2] given the high abuse potential for opioids, this is also a cause for concern.

Unless the "cultural transformation" called for by the IOM begins in earnest, our nation faces additional crises in the future. Many service members and veterans with pain also have comorbid conditions, such as posttraumatic stress syndrome or traumatic brain injury. Many of them are at risk for a lifetime progression of increasing disability unless the quality, variety, and accessibility of evidenced-based "self-management" skills are improved. Without more effective and

less costly approaches to pain management, the estimated costs of care and disability to the country will approach $5 trillion.[8] The loss of human potential is inestimable. This staggering cost will become the greatest threat to national defense as the nation is crushed under debt. Thus, for reasons of current and future national strength, and most important, the suffering of our service members and veterans, we must transform ourselves in the way we manage pain. We can and must do better.

Wayne B. Jonas, MD, LTC (Ret)
Eric B. Schoomaker, MD, PhD, LTG (Ret)

Author Affiliations: Samueli Institute, Alexandria, Virginia (Jonas); Uniformed Services University of the Health Sciences, Bethesda, Maryland (Schoomaker).

Corresponding Author: Wayne B. Jonas, MD, LTC (Ret), US Army, Samueli Institute, 1737 King St, Ste 600, Alexandria, VA 22314 (wjonas@siib.org).

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