Pain: The Silent Public Health Epidemic

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Abstract

More than 50 million Americans suffer from chronic pain, costing our society an estimated 565 to 635 billion dollars annually. Its complexity and training deficits in healthcare providers result in many patients receiving ineffective care. Large health inequities also exist in access to effective pain care for vulnerable populations. The traumatic history of indigenous people and people of color in regards to the experience of pain care perpetuates a lack of trust in the healthcare system, causing many to hesitate to seek medical treatment for painful events and conditions. Other vulnerable populations include those with sickle cell disease or fibromyalgia, whose experience of pain has not been well-understood. There are both barriers to care and stigma for patients with pain, including those taking prescribed doses of long-term opioids, those with known substance use disorder, and those with mental health diagnoses. The suffering of patients with pain can be "invisible" to the clinician, and to one's community at large. Pain can affect all people; but those most vulnerable to not getting effective care may continue to suffer in silence because their voices are not heard. Since 1973, pain societies around the globe have worked tirelessly to bring clinicians together to advance pain and opioid education, research, and patient care. These improvements consist of pain education, integrative treatment, and the understanding that a therapeutic alliance is critical to effective pain management. Pain education for both pre and post-licensure health professionals has increased substantially over the last decade. In addition, integrative and interdisciplinary approaches for clinical pain management are now considered best practices in pain care for patients with moderate to severe pain in addition to the development of a strong therapeutic alliance.

Keywords

chronic pain, substance use disorder, vulnerable populations, social determinants of health

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Introduction

Millions of Americans suffer daily from acute, chronic, and end of life pain. It is the primary reason why someone enters the emergency room or goes to their doctor or advanced care clinician.¹ An estimated 50 million Americans suffer from chronic pain, so it is not difficult to understand this as an epidemic.¹ The treatment of chronic pain has always challenged medicine and society.² In fact, enormous health inequities exist in access to effective pain care for certain populations including black, indigenous, people of color, and those impoverished and living on the margins.³ Pain, one of the most stigmatized of all medical conditions, does not discriminate by race, ethnicity, gender identity, or socioeconomic class.³ And many chronic pain patients suffer in silence without getting the care they need.⁴

History of Pain in Vulnerable Populations

There are many historical examples of vulnerable populations whose experience of pain has not been well-understood.

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Many indigenous people suffer from historical unresolved grief, experiencing a reawakening of old psychological wounds when pain is not understood or treated well.⁵ Enslaved women in the 19th century were frequently forced to undergo repeated gynecological surgeries without anesthesia—imagine the psychological trauma, patho-physiologically encoded in the central nervous system.⁶ Historically and still today, African Americans with sickle cell disease, the most common global genetic disease, experience under-recognition and undertreatment of severe bone pain during sickle cell "crisis."⁷

The intergenerational traumas described above persist today and perpetuate a lack of trust in the healthcare system.^{8,9} When obtaining care for acute or chronic pain becomes top-of-mind for individuals from populations who have suffered historically, they may hesitate to seek medical treatment for present or future painful events. 10 Obtaining treatment in the healthcare system for patients who have suffered adverse early life events and intergenerational trauma, can be seriously compromised. 11,12 Pain can overtake everything in one's life due to its all-encompassing, overwhelming feeling. 13 For the patient, pain may be accompanied by a sense that "no one will understand me" especially because of the sometimes "invisible" nature of pain, when there is no injury or disease that is obvious to an observer who cannot see the neurological processes in the central and peripheral nervous system that perpetuate pain initially caused by injury or disease.14 Pain is never silent for the patient, in whom the pain "screams." It is, however, more silent to the medical and public health establishment whose focus may be on the disease process or injury and on pains outcomes instead of the patient's poorly managed pain.¹⁵

For patients today, having one's pain effectively managed, therefore, can be a difficult journey, often harrowing and sometimes stigmatizing and even frightening. ¹⁶ Besides the stress of obtaining effective pain care, patients often suffer additional related stressors, such as loss of function, difficulty working at their jobs, and problems in relationships which may cause or exacerbate psychological problems, including depression, anxiety, and suicidality. ¹⁷

For clinicians providing empathic care for patients suffering from pain can be a very tall order. First, there remain areas in many medical and nursing pre- and post-licensure pain educational programs where additional content is needed to complete the curriculum. Second, interprofessional and integrative, team-based pain care is considered best practice which many clinical practices are not equipped to provide. Third, optimal pain care requires a clinician who can listen and understand their patient's point of view and who is able to develop a trusting therapeutic alliance with their patient. Lastly, given that patients with pain continue to experience stigma, clinicians caring for them have an obligation to understand their suffering.

Advances in Pain Education

The Institute of Medicine's "Relieving Pain in America" report 14 years ago identified significant gaps in pre-and post-licensure pain education in the United States. ²² Since then, pain education in the US has improved considerably. ²³ The improvements include: improved pain education, responsible opioid prescribing, more opportunities for advanced pain specialty training and a plethora of continuing medical education programs. First, many more health professionals are now receiving education and training on integrative and interdisciplinary approaches to pain management, although inconsistencies in pre-and post-licensure education remain. ²³

Secondly, during the last decade, there has also been a paradigm shift in how clinicians use opioid analgesics in pain management—from generous use to a more conservative approach based on recommendations from professional organizations and governmental entities.^{1,24} Unfortunately, this has created additional stressors for clinicians working on the front lines of the opioid epidemic.^{25,26}

However, improvements in pain education are working. Pain Medicine Fellows are now receiving the most diverse and advanced pain education available. There has been a 14% increase in the number of Accreditation Council for Graduate Medical Education (ACGME) programs in the last decade.^{27,28}

Lastly, primary care providers are able to connect to virtual telementoring programs such as Project ECHO for their post-licensure pain education and pain consultation needs.²⁹ Every US state now requires continuing medical education in pain management and/or substance use for licensure renewal.³⁰ Since 1973, pain societies around the globe have worked tirelessly to bring clinicians together to advance pain and opioid education, research and patient care.³¹ See Table 1. Pain education must continually improve and innovate given the complex and multi-faceted components of acute, chronic and end-of-life pain.

Interdisciplinary and Integrative Pain Management

People suffering with pain that is acute, chronic, or end-of life may benefit from a wide range of evidence-based treatment modalities which is delivered in a team-based approach.¹ The 2019 Health and Human Services Pain Management Interagency Task Force identified that best practices pain management is both interprofessional and integrative.¹ Additionally, recent literature confirms that pain education which is interdisciplinary in nature actually promotes interdisciplinary pain treatment.^{32,33} An interdisciplinary team caring for patients with chronic pain typically includes not only pain specialists, but psychologists,

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Table I. Organizational Stewardship of Societal Pain Management (USA).

Dates	Sample of pain management stewardship accomplishments—United States
1973	John Bonica in the Department of Anesthesia, University of Washington, founds the interdisciplinary International Association for the Study of Pain (IASP)
1975	American Society of Regional Anesthesia founded
1977	American Pain Society formed as a national chapter of IASP
1983	American Academy of Pain Medicine founded (originally American Academy of Algology)
1988	American Academy of Pain Management (Academy of Integrative Pain Management) founded
1990	American Board of Medical Specialties (ABMS) approves Pain Medicine Fellowships following Anesthesia Residency and established board examination & certification process.
1991	American Board of Pain Medicine founded to examine and certify residency-trained, clinically experienced pain physicians from Anesthesiology, Neurology, Neurosurgery, Psychiatry, and Rehabilitation Medicine
1991-92	Acute Pain Management Guideline Panel. Agency for Health Care Policy and
	Research. Public Health Service, U.S. Department of Health and Human Services.
	Establishes grading system for evidence of effectiveness of treatments.
1998	Australia and New Zealand College of Anesthetists establishes the first 2-year Pain Medicine Fellowship programs and specialty certification, a model for the world.
1998	NIH establishes the National Center for Complementary and Alternative Medicine (NCCAM), now renamed the National Center for Complementary and Integrative Health (NCCIH)
2001-2002	ACGME Task Force on Pain Management Fellowships establishes multi-specialty pain medicine training programs and certification guidelines for Anesthesiology, Neurology, PM&R and Psychiatry
2003	Department of Veterans Affairs (VA) establishes the National Pain Management Strategy Coordinating Committee,
2007	American Medical Association forms the Pain and Palliative Medicine Specialty Section Council
2008	Pain ECHO (Extension for Community Healthcare Outcomes—Pain) begins at the University of New Mexico (UNM) Health Sciences Center, eventually modelled in the VA, DOD and internationally
2009	VA establishes the biopsychosocial Stepped Care Model of pain management as national policy
2010	Army Pain Management Task Force Report to the DoD which adopts the VA's Stepped Care Model
2010	The VA and DoD establish the Pain Management Work Group, Health Executive Council of the Undersecretaries for Health to establish a system-wide approach to pain care, injury to recovery
2011	Institute of Medicine (IOM) Committee on Advancing Pain Research, Care, and Education. Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research.
2011	"Aches and Gains" Radio Show begins at Johns Hopkins, the first national radio show on pain and now a podcast on Sirius XM with more than 500,000 followers.
2013-14	NIH-HHS Interagency Pain Research Coordinating Committee (IPRCC), Patient Protection and Affordable Care Act: reports on needed care, education, research, and policy change
2016	Congress passes the Comprehensive Addiction and Recovery Act of 2016 (CARA) with major provisions for pain management, including requiring that VA Hospitals establish interdisciplinary pain teams and support regional pain rehabilitation programs.
2017	NIH-VA-DOD Pain Management Collaboratory established to foster non-pharmacologic research
2018	US Pain Foundation founded.
2018-19	Pain Management Best Practices Inter-Agency Task Force, Department of Health and Human Services (HHS) convenes relevant public and private professional organizations and patient advocacy groups to review national pain management practices and recommend needed changes.
2018	NIH cross-institute HEAL Initiative launched
2020	Centers for Medicare & Medicaid Services (CMS) creates the "Integrated Care Resource Center"

physical therapists, addiction experts, integrative health and other clinical specialties. 1,32

Chronic pain patients also need to find a primary care provider who can understand their pain, and make referrals to an interdisciplinary pain team if necessary. For a patient in moderate to severe pain, finding a primary care clinician can be very difficult.¹⁵ This is especially true if the

pain sufferer happens to be taking opioid analgesics to help alleviate his/her pain.³⁴ There are also a paucity of interdisciplinary programs available throughout the US and these centers may also be quite challenging to access.³⁵ One successful model is the collaborative stepped care model of the Veteran's Administration, developed in coordination with the Department of Defense.³⁶ This program has

successfully advanced integrative self-care and primary care pain management supported by pain medicine specialty teams.³⁶

Optimal Pain Care Requires a Strong Therapeutic Alliance

Those suffering with chronic pain who are fortunate enough to access a clinician to help them may be met with some frustration.³⁷ It may not be easy to find a clinician who truly understands the patient's suffering.³⁸ For example, a patient's pain complaint should never be dismissed or judged. Even if the etiology of the pain is determined to be emotional or psychic, the patient's suffering should always be considered valid by the treating clinician. 38 Chronic pain has both sociological and scientific definitions. Margo McCaffrey, RN, a visionary in pain medicine who died in 2018, stated in the mid-1960's that pain is "whatever the experiencing person says it is, existing whenever and wherever the person says it does." Developing a therapeutic alliance, therefore, can improve pain outcomes and help patients with chronic pain feel trusted. 40,41 This is especially important for the many chronic pain patients who have spent years suffering in silence.

Trusting one's clinician develops over time in the exam room, encouraged by the clinician's empathic behavior that demonstrates an understanding of the pain problem and its effects on the patient's life. ^{18,42} When a patient with chronic pain has the opportunity to connect with a trusting clinician, he/she can share his/her pain story more freely, trial medications and other multi-modal treatment recommendations with more confidence and return to clinic with increased confidence.

Conclusion

Pain is not silent for patients, it hurts. However, despite its prevalence and cost, pain is relatively silent in the health care and public health systems, which often pay more attention to pain's devastating mental health consequences (depression, suicide, and substance abuse) than to the pain itself.

Education for healthcare professionals in pain management must continue to expand and include training in alternatives to opioid analgesics while understanding when and how to prescribe opioids, always with careful monitoring. It is essential that access to best practices interdisciplinary and integrative pain management continue and expand so that more patients suffering in pain can obtain optimal care. Finally, patients deserve a clinician who understands their suffering and can develop a therapeutic alliance with them. This is a tall order but one that should not be forgotten.

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