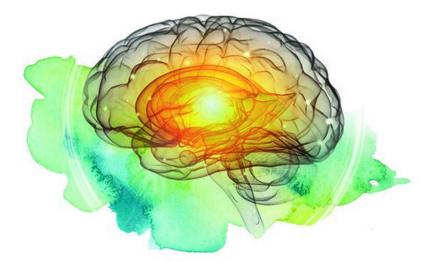


A mindful approach to chronic pain and opioid use for our nation's Veterans



Almost daily, there are tragic stories in the media about our country's opioid crisis and lives lost to the epidemic, from celebrities and promising athletes, to the neighbor down the street who silently struggled with chronic pain for years.

It wasn't that long ago that driving was deadlier than drugs in America. But since 2008, drug overdoses have become the number one cause of accidental death in the United States, bumping motor vehicle accidents to number two.¹ That change was driven largely by prescription opioid abuse — the deadly drug crisis striking people of all ages, races and income levels.

There are numerous and well-cited reasons for our national opioid crisis. It is the result of many complex factors and requires a multifaceted approach to treat. For example, often mentioned is that opioids have become alarmingly easy to obtain, compared to previous decades, when these powerful painkillers were reserved for cancer treatment and end-of-life care.

An even greater challenge for our Veterans

The figures are even more staggering for our nation's Veterans. While 30 percent of the adult U.S. population experiences chronic pain, almost 60 percent of returning Veterans from the Middle East, and more than 50 percent of older Veterans in the U.S. Department of Veterans Affairs (VA) health system report living with some form of chronic pain,³ and many of them turn to opioids for relief. The number of Veterans with opioid-use disorders spiked 55 percent between 2010 and 2015,⁴ and according to a 2011 study of the VA system, Veterans are almost also twice as likely as non-Veterans to die from accidental opioid overdose.⁵

Americans constitute only

4.6%

of the world's population, yet consume

80%

of the global opioid supply.

40%

of all U.S. opioid overdose deaths in 2016 involved a prescription opioid, and

46 people

die every day from overdoses involving prescription opioids.²



For our Veterans, addressing and treating chronic pain and opioid-use disorders may be even more complex. Although their stories may not make front-page news, for many of our nation's Veterans, living with debilitating and chronic pain is a daily reality. Adding to the complexity of treating pain in our Veterans, are increasing numbers of Veterans struggling with behavioral and mental health issues related to PTSD and traumatic brain injuries.⁶

Since 2017, to stem the tide of the opioid crisis among Veterans, a number of initiatives have been spearheaded by the VA and Veterans groups, including new comprehensive prescribing guidelines and exploring alternatives to the use of opioids for pain management.^{7, 8, 9}

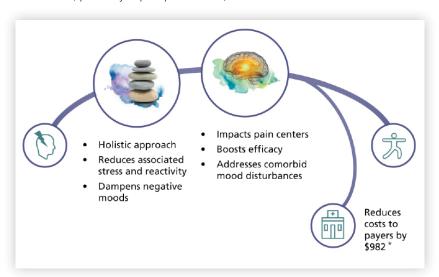
There is no easy answer to curbing the tide of this deadly and tragic epidemic, in the general population or among our Veterans, but there is hope in some integrative and promising evidence-based approaches, including mindfulness meditation.

Mindfulness meditation and pain reduction

In the 1970s, Jon Kabat-Zinn, PhD, now professor of medicine emeritus at the University of Massachusetts Medical School, was growing increasingly concerned about patients with chronic or severe pain who had access to few, if any, alternatives to nondrug therapies. He designed an innovative intervention called Mindfulness-Based Stress Reduction (MBSR) — a meditative approach that fostered mind-body awareness — initially as a complementary treatment for chronic pain.¹⁰

Kabat-Zinn's early research on chronic pain demonstrated statistically significant reductions in pain and pain-related drug utilization, and increased feelings of self-esteem among patients who participated in MBSR programs.¹¹ Although rooted in ancient Eastern contemplative traditions, mindfulness meditation was adapted by Kabat-Zinn as a secular practice that encourages nonjudgmental awareness of the present moment, fostering well-being and increased self-regulation.

When implemented, mindfulness and meditation is a holistic approach that can reduce stress, positively impact pain centers, and reduce health care costs.



* Herman PM, Anderson ML, Sherman KJ et al. Cost-effectiveness of mindfulness-based stress reduction vs. cognitive behavioral therapy or usual care among adults with chronic low back pain. Spine. Oct. 2017. 42(20).

Many of our Veterans have survived severe battlefield injuries, some repeated, resulting in lifelong moderate to severe pain related to damage to their musculoskeletal system, and permanent nerve damage, which can not only impact their physical abilities but also impact their emotional health and brain structures.

- Dr. Carolyn Clancy

2015 Interim Under Secretary for Health, VA, in 2015 testimony to the U.S. Senate Committee on Veterans Affairs

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Today, MBSR and other mindfulness-based programs are commonplace in hospitals, workplaces and community settings throughout the United States. The growth and interest in mindfulness is due in large part to an impressive body of evidence that suggests mindfulness meditation practices can mitigate a number of physical and mental health issues, ranging from dealing with cancer and depression, to sleep problems and chronic pain.^{12, 13}

The VA has conducted a number of its own studies in recent years to determine the effectiveness of mindfulness meditation as a tool to assist Veterans suffering from symptoms, including PTSD and chronic pain.¹⁴ A 2016 study published in *Military Behavioral Health* suggests mindfulness meditation can help Veterans control their pain. The research, led by Thomas Nassif, Ph.D., of the Washington, D.C., VA Medical Center and American University's Department of Health Studies, found that:

Veterans who practiced meditation reported a 20 percent reduction in pain intensity, as well as lowered pain interference with sleep, mood and activity level.¹⁵

Nassif also reported that in many cases, primary care physicians, who are expected to help individuals overcome their chronic pain, often prescribe opioids as part of the treatment. While Veterans in this study, and many who attend meditation sessions, find that opioid medication is a short-term solution, others believe that meditation could be a useful, adjunctive tool to help Veterans manage their pain over the long term.¹⁶

Building resiliency and well-being through mindfulness

In addition to alleviating pain, practicing mindfulness may also provide an important tool for enhancing resilience and well-being, for Veterans and non-Veterans alike. A recent study highlighted the link between mindfulness and resiliency and stated that people who practice mindfulness "can better cope with difficult thoughts and emotions without becoming overwhelmed or shutting down (emotionally)." Mindfulness empowers its practitioners to be less reactive and to respond to life's difficulties — whether acute pain, depression or everyday stressors — with increased wisdom and compassion.

Moving forward

The current state of chronic pain and opioid use in the United States may indeed be daunting and require a multifaceted approach; yet, there is promise for our Veterans and the more than 100 million Americans¹⁸ who suffer from chronic pain in the age-old and now richly evidence-based practice of mindfulness meditation.

At Moment Health, we want to be part of the solution to help stem the tide of this crisis for our Veterans and others who suffer from chronic pain. Moment Health is a part UnitedHealth Group Ventures, and since our founding in 2014, we have helped thousands of people through programs that are focused on individual resiliency and the mind-body connection, with the goal of reducing the devastating impact of chronic pain. Our programs teach participants a variety of mindfulness-based approaches to help relieve pain, address the underlying emotional contribution to pain and suffering, lower stress, and improve overall quality of life.



"Meditation allows a person to accept pain and to respond to pain with less stress and reduced emotional reactivity. Our theory is that this process increases coping skills, which in turn can help Veterans to self-manage their chronic pain."

— Thomas Nassif, Ph.D.
VA Medical Center, Washington, D.C.

Mindfulness and resiliency training can help Veterans and others suffering from chronic pain. Evidence-based outcomes include:

- Lower levels of stress
- Better sleep
- Improved health and well-being
- Reductions in mood disturbances
- More positive emotions
- Improved concentration
- Greater levels of patience
- Enhanced empathy and compassion

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UnitedHealth Group® is a distinctively diversified health and well-being company and a leader worldwide in helping people live healthier lives and helping make the health system work better for everyone. Under the UnitedHealth Group umbrella, UnitedHealth Group Ventures is focused on investing in companies that drive improved health care quality and affordability; and considers new ideas and innovative partnerships.

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About OptumServe

OptumServe is part of Optum and the UnitedHealth Group® family of companies. We provide health services and proven expertise to help federal agencies tackle some of the biggest challenges in health care. We partner with the Departments of Defense, Health and Human Services, Veterans Affairs and other organizations to modernize the U.S. health system and improve the health and wellbeing of the people they serve.

About Moment Health

Moment Health, a UnitedHealth Group business, offers customized and expert-led mindfulness programs to individuals, teams and organizations. Mindfulness, the practice of being fully present in each moment, has been scientifically proven to change the inner workings of the brain. It results in stress reduction, improved concentration, more effective communication and overall health improvement.

For more information on Moment Health and its mindfulness programming and services:

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