

# Opioids and Yoga Therapy

## What You Need to Know

By Frederick Taylor and Matt Erb

We are in the midst of what some are calling the worst public health drug crisis in decades.<sup>1</sup> That crisis is in opioid treatment of chronic non-cancer pain. The Centers for Disease Control and Prevention (CDC) reported that in 2012 alone, U.S. providers wrote 259 million prescriptions for opioids—more than a pill bottle for every adult.<sup>2</sup> In 2011, the Obama administration referred to an epidemic of prescription drug abuse, and in March 2016, President Obama said that this epidemic is “costing lives and it’s devastating communities.”<sup>3</sup>

Worldwide, the UN Office on Drugs and Crime estimates that between 26 and 36 million people abuse opioids (use them without a prescription, in a way other than prescribed, or for the experience or feelings elicited), with an estimated 2.1 million people in the United States suffering from prescription opioid substance use disorders in 2012.<sup>4,5</sup>

Opioid overdose deaths have doubled or tripled in many U.S. states in the past decade and risk of overdose increases as the dose increases. Prescription opioids and illegally-made prescription fentanyl and illicit drugs like heroin are now the largest contributing cause of injury death in the United States today, occurring across all age groups but with a concentration between 25 to 54 year olds.<sup>6</sup>

Opioids include opiates, natural derivatives of opium, and synthetic drugs such as hydrocodone and oxycontin. Opioids, also known as narcotics, have been used as analgesics for centuries as well as used recreationally. Opioid analgesics are extremely effective therapies when used properly—for short-term acute pain and terminal cancer.<sup>7</sup> The evidence base, however, has increasingly suggested that long-term opioid use for chronic pain carries substantial risks and uncertain benefits.

How can yoga therapy help? Thus far, four meta-analyses support the use of yoga for chronic pain treatment, with some evidence for benefit from even

short-term interventions.<sup>8,9,10,11</sup> The CDC has recently published extensive new guidelines for clinicians treating clients with chronic pain in an effort to promote more safe and effective treatments. In these guidelines, it states that “nonpharmacologic therapies can ameliorate chronic pain while posing substantially less risk to patients. In some instances, other therapies result in better outcomes than opioids. These therapies include exercise therapy, weight loss, psychological therapies such as cognitive behavioral therapy, interventions to improve sleep ...” It is not difficult to see how yoga therapists (YT) are positioned to play a critical role in preventing, minimizing, and alleviating pain or simply supporting the pain patient.

### Opioids and Pain

#### Current Environment

A 2015 Medscape survey reported that 88% of providers prescribed narcotics and 63% of surveyed patients admitted to using them. The majority was for acute pain, 28% for chronic non-cancer pain, and 2% for cancer pain. While the majority of patients received important information about opioid use, only about 25% were screened for personal history of past abuse/addiction or family history of addictions. Only 19% of patients surveyed reported using mindfulness/mind-body techniques to help manage their pain.

#### The Science

An opioid is a chemical that binds to three different types of receptors (mu, delta, and kappa) that are important mediators of most known neurotransmitters and hormones. Each opioid receptor mediates distinct effects. For instance, while all three receptors mediate spinal pain, mu opioid receptors mediate pain from higher levels. Opioid receptors are particularly intriguing because they are activated both by internally produced endorphins and by externally administered opioids. Pain relief results from a complex series of interactions, which ultimately results from synergy between reducing the pain threshold and facilitating emotional detachment from the pain.<sup>12</sup>

In most cases, long-term use of opioids (three months or more) develops into tolerance, in which increasing doses of the drug are required to achieve the desired effect. In some cases, this will also lead to increased sensitivity to stimuli that do not normally produce pain (allodynia), and eventually to an excessive pain response (hyperalgesia), which will be discussed further below.

Physical dependence also develops with chronic use of opioids, characterized by the onset of withdrawal symptoms as the drug effect wears off (Figure 1.). The user “fixes” the symptoms with another dose. The time it takes to develop dependence varies by individual, and it is possible to be dependent without being addicted. Indeed, most chronic opioid users do not have opioid addiction, but all are physically dependent. Addiction, or substance use disorder, is a more severe behavioral syndrome of repeated, compulsive seeking (psychological dependence) or use of a substance despite adverse social, psychological, and/or physical consequences, along with the physical need for an increased amount of a substance over time.

Early	Late
• Agitation	• Abdominal pain/cramping
• Anxiety	• Diarrhea
• Muscle aches	• Dilated pupils
• Increased tearing	• Goose bumps
• Insomnia	• Nausea
• Runny nose	• Vomiting
• Sweating	
• Yawning	

Figure 1. Opioid Withdrawal Symptoms

#### Adverse Drug Events/Side Effects

An adverse drug event (ADE) is injury or harm caused by or from the use of a drug and is a preferred term for side effects, the latter which tends to normalize the concept of injury from drugs. Prevention of

ADEs is a national priority. In a systematic review of opioid-related ADEs, whites are most at increased risk. However, few studies provided adequate standardization, controlled for confounders, or were specifically designed to evaluate racial or ethnic disparities.<sup>13</sup> Common opioid ADEs include constipation, sedation, and nausea. Potentially more serious ADEs include depression, hormonal changes, and worsening of pain. The risk of depression starts as soon as a person begins taking opioids and increases significantly as the duration of opioid prescription increases. Opioid-induced androgen deficiency (OPIAD), a reduction in hormone secretion by the testes or ovaries, can occur through alteration of the hypothalamic-pituitary-gonadal/adrenal axes in both men and women. The symptoms (Figure 2) are often not recognized as being linked to opioid use. Opioid-induced hyperalgesia is another chronic exposure state most broadly defined as increased pain caused by external opiates. It is recognized by a paradoxical response whereby pain becomes more widespread than originally present and responds more sensitively to stimuli. Complex pain facilitatory mechanisms (sensitization of nociceptive mechanisms) in the central nervous system are known to contribute to opioid-induced hyperalgesia. This can occur in chronic pain states independent of opioid use but is believed to be amplified by exposure to long-term opioid use. You can suspect opioid-induced hyperalgesia when opioid effectiveness seems less evident, particularly if found in the context of lack of disease progression, unexplained pain reports or diffuse skin sensitivity (allodynia), especially when unassociated with the pain as previously reported by the client.

Symptoms	Physical findings
• Impaired sexual function	• Reduced facial and body hair
• Decreased libido	• Anemia
• Irregular menses	• Decreased muscle mass
• Infertility	• Weight gain
• Hot flashes	• Osteopenia/osteoporosis
• Night sweats	
• Depression	
• Fatigue	

**Figure 2. Opioid-Induced Androgen Deficiency Symptoms.**

**Chronic Non-Cancer Pain and Opioids — The Evidence**

Several systematic reviews have concluded that opioids have limited overall effectiveness for reducing chronic pain long-term and for improving the patient's level of function.<sup>14,5,16</sup> In addition, they have a poor safety profile with high risk of side effects.<sup>17,18,19</sup>

**Opioids, Pain, and Yoga Therapy**

Yoga therapy fundamentally reflects an integrative biopsychosocialspiritual approach. This is important for all people seeking care through yoga, but may be even more important for the persistent pain client on opioid management, which often reflects a strong external locus of control in

**Opioids have limited overall effectiveness for reducing chronic pain long-term and a poor safety profile with high risk of side effects.**

relationship to the pain experience. That is, long-term users of opioid painkillers often feel that they are not able to help themselves with their pain and tend to rely on outside sources such as medication and surgery. This is an important area in which yoga therapists can help clients in chronic pain, because the emphasis in yoga on self-awareness, self-discipline, and effort can help to instill and cultivate a client's sense of self-efficacy—a crucial component in the process of learning functional ways to manage pain.

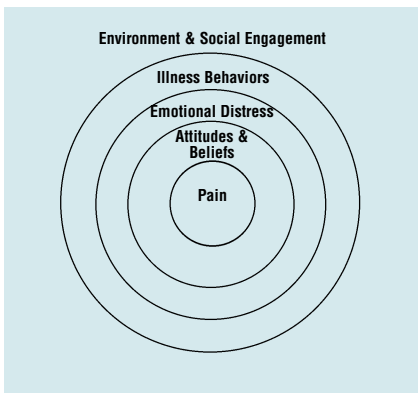
As a YT, it is important to be sensitive to the complexities that inform the experience of a client who shows up for yoga therapy on chronic opioid therapy. We recommend being cautious about giving advice, and reserve your judgment. Focus on establishing a healthy understanding and compassionate relationship with the client and all that informs their pain experience. As always in yoga therapy, a fundamental tenet of care is to remember you are working with a person, not a diagnosis, nor an “opioid user.” Meet the person where they are and serve as a gentle educator and guide. Understand that pain triggers do not occur by themselves—they occur in a living system, in a life. Also remember that change is hard.

We encourage you to avoid suggesting to a client that their use of opioids is a barrier to improvement in their wellbeing. If your client shows signs of dependence or addiction, or if a client expresses interest in reducing or going off of their opioids, this warrants appropriate referral to a knowledgeable medical provider, because these processes require medical monitoring. If your client does not broach the topic, we suggest you remain neutral about your client's opioid use or address it indirectly, such as in the use of functional education (“just the facts”) and the use of motivational client-centered interviewing (“What changes would you like to make?”). Pain, defined as an unpleasant sensory and emotional experience associated with actual or perceived tissue damage, must be differentiated from the pain experience

(PE), which is a behavior pattern involving factors such as restricted breathing, abnormal posturing, guarding, holding patterns, emotional distress, deconditioning, abnormal sleep, negative thoughts, and social/family impact. All of these are impacted by opioid use. We suggest that you work with the overall PE by addressing contributing lifestyle factors rather than focusing on the pain per se or on the topic of opioid use itself. It will usually be more useful to cultivate the client's awareness of the pain experience and to develop the therapist/client healing relationship. Upon intake, in addition to assessing pain levels and opioid-use history, contemplation of “yellow flags” as part of the pain environment (attitudes and beliefs, psychological distress, illness behaviors and social/environment focused around the PE) is useful. This contributes formation of a more complete picture of the client with chronic opioid therapy and areas within the scope of yoga therapy needing the most attention.<sup>20</sup> (Figures 3 and 4.).

**Opioids, Emotion, and Yoga Therapy**

Opioid science informs that in addition to mediating the perception of physical pain, centers involved in emotional processing are also affected by opioids, which can lead to emotional changes, including



**Figure 3. Pain Environment Conceptual Model**

increased aversion to uncomfortable sensation and numbing of emotion.<sup>21</sup> In addition, clinical practice informs that persons on chronic opioid therapy for persistent pain may have poor or heightened emotional awareness and you should consider strategies for working with either. In a similar way, if the client has comorbid anxiety, even benign sensations can increase anxiety and avoidance, whereas comorbid

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depression may link sensation to increased negative thoughts. Yoga therapy tools bring clients' awareness to these effects as well as supporting emotion regulation and cultivation of positive mental states. However, if signs of clinical depression or other serious mental illness present, please do not presume that yoga therapy is sufficient but discuss appropriate referral.

Opioids have also been shown to inhibit the physiology of attachment anxiety (fear of abandonment), which is also linked to anxiety/panic disorder.<sup>22</sup> Thus, opioid use is often medicating more than just physical pain. In addition, it's important to understand that clients, especially those reducing their opioid use, may have higher than average sensitivity and reactivity to emotional stress, necessitating mind–body self-regulation training as a priority. Opioids may temporarily increase

Cognitive: Beliefs, thoughts, judgments	Unhelpful beliefs about pain condition: Indication of condition as uncontrollable, expectations of poor treatment outcome, negative thoughts, linked to nocebo effect
Emotional distress	Worry, fear, anxiety, also linked to nocebo effect Unrecognized or unexpressed grief, sadness, shame, etc.
Illness behaviors/ pain coping strategies	Avoidance of activity/movement Over-reliance on passive treatments Maladaptive use of opioids and other medications, progression of use

**Figure 4. Example “Yellow Flags”**

feelings of social comfort but they also decrease motivation to seek out social contact. Cultivation of a safe and empathetic relationship with the client is fundamental and may in itself activate the endogenous opioid system,<sup>23</sup> contributing to the goal of pain relief. We also encourage you to facilitate client self-expression through verbalizing, drawing, writing, imagery, movement, and similar tools, and

does not activate the pain/alarm system. The key here is that opioid use would serve a supportive rather than a leading role in treatment, but this should only be undertaken with continuous guidance from a medical provider.

**Conclusion**

Opioid medications are helpful for those who desire them while recovering from an acute injury, following a painful surgery allowing the restoration of movement, or with terminal cancer pain. However, long-term use of opioids for chronic non-cancer pain is problematic.

Fear of pain is often worse than the pain itself and ultimately pain is less painful when we are confident that we are safe. Opioid use can become a maladaptive behavior rooted in the innate drive for safety. Yoga therapists are uniquely suited to aid in pain prevention, management, and healing by facilitating clients with pain and opioid use towards an experience of safety that is equally nurturing as empowering by facilitating awareness and change in all levels of human experience.

YTT

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remember to normalize the client's experience. Stress, anxiety, and depression are not reflective of a weakness or character flaw, nor is opioid use, even when it may not reflect the optimal strategy for coping with one's experience of pain and life in general. Opioid dependence or addiction are best understood as chronic medical disorders just like hypertension, diabetes, or schizophrenia and requires a compassion-informed whole-person approach.

**Integrated Care**

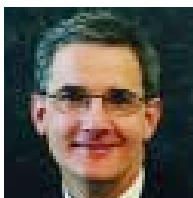
Consider finding medical providers in your area with an understanding of the impact of opioids on pain management, especially those who offer assistance with an exit strategy should a client be motivated to reduce or eliminate use. In some cases, short-term utilization of opioids can be helpful to assist with the goal of a client learning how to experience movement that

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## Feature: Opioids

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## Members News

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### Responsible Self-Regulation:

### Comments on the Recently Published Yoga Alliance Position on Yoga Therapy

By John Kepner, IAYT Executive Director

Published on the IAYT website\*

We at IAYT were as surprised as everyone else to learn that Yoga Alliance (YA) had taken a formal organizational position on yoga therapy, following the publication of a legal analysis of the practice of yoga therapy in the United States. Upon reflection, however, it makes sense for the YA to distinguish what they do from what IAYT does, since neither YA's standards nor their mission are designed to support yoga therapy as an emerging field distinct from yoga teaching. Yoga therapy is here to stay, with widespread and growing acceptance as an adjunctive therapy in an integrative approach to health, so it is timely to more carefully identify the distinguishing characteristics and develop distinct credentials.

After discussion with our members, our committees, and at IAYT's recent annual board meeting and a community meeting at the Beloved Yoga studio in Reston, VA, we would like offer a few additional comments on the YA position on yoga therapy.

- From IAYT's perspective, yoga therapy is not “diagnosing and treating” health conditions. While it's not easy to summarize a wide range of healing practices in just a few words, we might say yoga therapists “assess and educate” in order to “empower individuals to improve their health and wellbeing through the application of the teachings and practices of yoga.”
- IAYT's complete definition is, of course, much more comprehensive than the summary sentence above. Our definition was first published in 2012 in conjunction with our educational standards; for more information, refer to the article “What is Yoga Therapy, an IAYT Definition” in the Resources section of the IAYT website.
  - o The YA-financed legal analysis of yoga therapy practice in the United States cited as IAYT's definition of yoga therapy a single sentence we published back in 2007.
  - o Similarly, that analysis quotes and criticizes a very old article

entitled “Current Illustrative Standards for Yoga Therapists” written in 2003. That is a far cry from our actual and extensive “Educational Standards for the Training of Yoga Therapists” published in 2012 and our first draft Scope of Practice just published this year.

- The YA-financed legal analysis seems to lack awareness of the widespread acceptance of yoga therapy and IAYT's comprehensive efforts towards responsible self-regulation. It also lacks awareness of the normal development sequence for emerging healthcare professions and is thus *unduly alarmist* about what is actually a normal evolutionary process found in any emerging profession.
- For those of you who are interested in an extensive review of the YA-financed legal analysis and a different perspective on the unregulated practice of yoga therapy, see the following document on the IAYT website: “Comments regarding the Legal Risk of Unregulated Yoga Therapy,” by Daniel Seitz, JD, EdD.
- The language requirements of the new YA policies initially appeared confusing and disruptive to those who provide both yoga therapy and yoga teaching. We are now observing new language emerging, however, which seems to comply with both the letter of the YA requirements and the spirit and substance of their yoga therapy teachings.

IAYT is concerned that the YA position could create a divide in the yoga world and a communications gap between two organizations that ideally would have good lines of communication and offer each other mutual support. Indeed, good communication and mutual support with the YA and our other sister association in the U.S., the National Ayurvedic Medical Association, has been IAYT's long established policy. We are heartened, then, by the fact that Yoga Alliance recently reached out to us to communicate about the issues above, and we look forward to continuing such communication in order to better serve the broad yoga tradition, our overlapping membership and especially the millions of individuals practicing yoga for health, healing, and spiritual support.

YTT

\* Read the full commentary on IAYT's website <http://www.iayt.org/news/277490/IAYT-on-Yoga-Alliance-Stance-on-Yoga-Therapy.htm>

See also “YTh Leading Voices Comment on YA Policy” [www.iayt.org/page/YThLeadersComment](http://www.iayt.org/page/YThLeadersComment)