

The Guide on Pain



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Did you know...

research has shown that merely learning more about pain, how pain allegedly works, and why we have pain may help to reduce your pain.

With that in
mind,

I hope this Ebook answers some of your pain questions, allows you to think more about your bouts with pain, and educates you on what pain and is not.

If you have any questions or want to book a free call with a licensed physical therapist,

[PLEASE CLICK HERE.](#)



For the first time since 1979

the International Association for the Study of Pain (IASP) has revised the definition of pain. Pain is now defined by IASP as “An unpleasant sensory and emotional experience associated with, or resembling that associated with actual or potential tissue damage.”

Along with this new definition of pain, the IASP also added six key notes to expand upon the definition:

- 1) Pain is always a personal experience influenced to varying degrees by biological, psychological, and social factors.
- 2) Pain and nociception are different phenomena. Pain cannot be inferred solely from activity in sensory neurons.
- 3) Through their life experiences, individuals learn the concept of pain.
- 4) A person’s report of an experience as pain should be respected.
- 5) Although pain usually serves an adaptive role, it may have adverse effects on function and social and psychological well-being.
- 6) Verbal description is only one of several behaviors to express pain; inability to communicate does not negate the possibility that a human or a nonhuman animal experiences pain.

If you want to learn more about

[IASP, CLICK HERE.](#)



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I have experienced persistent pain for many years and know how frustrating and disruptive pain can be to your life



I also treat people every day with pain problems ranging from acute pain episodes to long-standing complicated pain conditions.

Below are seven facts about pain that might surprise you and give you a deeper understanding of pain and how you can take the necessary steps to reduce it! Research has shown that merely learning more about pain, how pain allegedly works, and why we have pain may help to reduce your pain

01

Pain is a Top-Down Not A Bottom-Up Phenomenon

What does this mean?!?

I think the easiest way to describe this is with an example: If you step on a nail, you want to know about it so you can take the nail out of your foot and perhaps get to a hospital or physician to get a tetanus shot or antibiotics. What happens when you step on that nail is a danger signal (what we in the medical world call a nociceptive signal) is sent through nerve fibers to your spinal cord then up to your brain. The danger signal then says to your brain, “there is something happening in your foot.



What should we do? ”.

The brain then analyzes the situation, taking into account tissue damage or potential tissue damage, the context, chemical reactions in the body, your thoughts and beliefs, and many other factors, and then the brain decides

“HOW DANGEROUS IS THIS REALLY?”.

If the brain determines the situation is dangerous enough, you will have pain. The pain experience is your body's HARM ALARM. Because the brain determines pain (not the part of the body where the pain is located), we say that pain is a top-down phenomenon.



There is no such thing as a pain signal or a pain pathway! So let's stop using those terms altogether.

There are danger signals or danger pathways, but the brain ultimately decides, is this dangerous? Does the body need to be protected? If the brain determines that there is an actual or perceived threat, you will have pain. Check out this great [Tedx talk](#) by professor and researcher Dr. Lorimer Moseley for a more in-depth explanation.

02

Tissue Damage and Pain Are Not Always Related

Another way to look at it is: If there is pain, it does not mean there is tissue damage, and if there is tissue damage, it does not mean there is pain. Some examples of this are:

- Did you ever notice a bruise on your body and have no idea when you got that bruise? That is evident tissue damage (veins and capillaries have broken), yet you had no pain.

- We can randomly select 20 asymptomatic people off the street and place them in an MRI machine for their back. Odds are more than half of them would have some abnormality on the MRI. Anything from herniated discs to arthritis to bulging discs yet that have ZERO pain.



Both of these are examples of apparent tissue damage, yet the brain did not think it was dangerous enough to protect you, so there is no pain. On the flip side, there can be pain when there is no tissue damage or when injured tissues have completely healed. Think about the story Dr. Moseley told in the TEDx talk above. He was in excruciating pain after being scratched by a stick.



03

Context Matters!

The pain experience can be dependent on the context or situation you are in. Let's take another example: You sprained your ankle. We all know that when you twist or sprain your ankle, it usually hurts!

Let's look at that ankle sprain in 2 different scenarios:

1) You are walking in your home, and you sprain your ankle and fall to the ground. Your brain will analyze this situation and most likely want to protect you. As a result, you will have some degree of pain.



2) You sprain your ankle in the middle of crossing the street and then look up and see a bus headed straight for you. Again, your brain will analyze the situation and (hopefully) conclude a bus hitting you is far more dangerous than an ankle sprain. As a result, the brain doesn't care if you sprained your ankle and wants you to run as fast as you can out of the way of the oncoming bus...so no ankle pain.

That does not mean you might not have some ankle pain after, but you will very likely have no ankle pain at the moment of the fall.

This is an example of the same injury, but due to the context of that injury, the pain outcome is entirely different.

04

Acute Pain vs. Chronic Pain

As I said above, pain is there to protect you and is your harm alarm. This alarm will go off when you have an acute injury.

It is entirely **NORMAL** to have pain with an acute injury.

Remember, we want to know if something on our body is genuinely injured so we can tend to it. More often than not, acute injuries heal. The damaged tissues repair over time, and as a result, you have less and less pain.

The harm alarm slowly decreases in intensity, your pain reduces and eventually goes away. Again this is a very NORMAL progression for an acute injury. The more complex type of pain is a chronic pain situation. As defined by the International Association for the Study of Pain, chronic pain is pain that persists well beyond the average amount of healing time.

The line between acute and chronic pain is about the three-month mark.

Usually, by three months, the acute injury should have healed and the pain eliminated. In some people, the pain persists well beyond this three-month time frame, and that is when things get tricky.

If the tissues have healed, why are you still having pain?

Like I said above, pain is a top-down phenomenon, and tissue damage is not necessary for pain. Your nervous system (brain, spinal cord, nerves) runs the show when it comes to pain...especially with chronic pain conditions. Your nervous system loves you so much that it is overprotective....just like the overprotective parent!

Another way of looking at chronic pain is the nervous system is now more sensitive.

Because of this increased sensitivity of the system, it takes less to create the danger signal sent to the brain. Even though your tissues are nowhere near being damaged during an activity, the nervous system is so sensitive that it will send the danger signal way too early.

Your brain will then analyze the situation, and given it is now used to protecting you (even when it is not necessary), you will have pain. This is how you can continue to have pain even when there is no tissue damage, or your tissues have healed.



05

Should I Take An Opioid?

Before we talk about the use of opioids, I think it makes sense to define what an opioid is first. The definition of an opioid from the Merriam Webster dictionary:

- Any of a group of endogenous neural polypeptides (as an endorphin or enkephalin) that bind especially to opiate receptors and mimic some of the pharmacological properties of opiates —also called opioid peptide
- A synthetic drug possessing narcotic properties similar to opiates but not derived from opium; broadly

Most people are more familiar with the second definition of an opioid as a synthetic drug, so that we will start there. People are often prescribed an opioid medication after a surgical procedure, following an accident with damage to the body, or for common pain problems like low back pain.

If you just had surgery or an acute injury, then an opioid may work well for short-term use to control pain. In my opinion, this where opioid use should stay: for short-term pain relief after surgery or serious bodily harm

The problem with opioid use is when prescribed for long-term use or those with chronic pain conditions. Science has shown that when used for long periods, opioid medication has the opposite effect on pain! Long-term use can increase the danger pathway's efficacy (as described in Fact #1) and cause you to become hyperalgesic. This means you now have an even more sensitive nervous system, it may take less input into that system to create the output of pain, and you may have an enhanced intensity of pain sensation. In a nutshell: when you take opioids for long-term pain relief or for more chronic conditions, they will cease to relieve your pain and most likely make it worse!

Let's talk about the first definition above. I am sure you are thinking, what is an endogenous neural polypeptide? It is a neurotransmitter that already exists in your own body! Believe it or not, your brain has more pain-fighting capabilities than you can ever take from a pill. Is that great news or what! The question is, how do we harness those neurotransmitters to work for us? [Check out this quick video](#) from Dr. David Butler to find out how. Hint...it has to do with the brain!

** The opioid epidemic in the United States has reached a crisis level. For more information about the opioid epidemic, check out the U.S. [Department of Health and Human Services resources](#).

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Fear Avoidance Can Make Pain Worse

Have you ever said to yourself, "I can't do that movement; it will make my pain worse" or "I would love to go out with my friends, but I am afraid it will make my pain worse" or "I can't do that activity, it will make my pain worse"?

These are all examples of fear-avoidance thoughts that, more often than not, become fear avoidance behaviors. These behaviors can lead to disuse of the musculo skeletal system, social isolation, hyper-vigilance to your pain condition, and continue the thinking of "I have pain. Therefore, I am damaged".

Studies have shown that fear-avoidance behavior can make your pain worse and chronic. I am not saying that you have to jump out of a plane or bungee jump from a bridge when you have a painful episode. Still, you want to make sure that you keep yourself moving by going for a walk or performing exercises given to you by your physical therapist.

You want to make an effort to be with friends and family and continue to have a social life. Remember that being active physically, mentally, and socially will be a positive input to your brain, and it may be enough to break up that danger signal and turn down your harm alarm.



07

Your Pain Is Real!

One last thing to remember...your pain is real pain! Having lived through years of chronic neck pain myself, I cannot stress this last point enough. This is especially important for those with chronic pain conditions. On the outside, you look just fine. You are not necessarily walking with an assistive device, you don't always have a brace on, you are still going to work, you are taking care of your family, and trying to spend time out on the town. Because of this, people may not understand, or they may even question that you are LIVING with chronic pain. There is no doubt this can be upsetting and frustrating at times. Know that if you are feeling pain, it is real, and you are not making it up, and it is not all in your head!



I hope that these seven facts about pain give you a better understanding of this complex human experience. Pain is never straightforward, and in chronic conditions, you need a team on your side. That team may include a physician, a pain psychologist, a health or life coach, supportive family and friends, and of course, your PHYSICAL THERAPIST!

I am here to answer YOUR questions about your pain. As I said, you or your loved one need a team on your side. As someone who has lived with persistent pain, I understand how frustrating it can be to find the help you need

Let's talk!

You can reach me and my colleague, Dr. Kenny Venere, [here](#)