The <u>Pain Truth</u> videos & <u>Workbook</u> are part of a **6-week program** and aim to improve the quality of life and the management of your persistent pain.

It is **absolutely essential** to complete the activities and instructions outlined in <u>The Pain Truth and Nothing But!</u> Workbook.

(Video is on www.youtube.com) (Workbook is on www.amazon.ca)

## Pain Truth Video #1 Transcript

Hello, my name is Dr. Bahram Jam and I am a physical therapist in Toronto, Canada.

You're likely watching this educational video because you may be dealing with some kind of persistent pain. Or perhaps you've read my book The Pain Truth...and Nothing But! or plan on reading it after this video.

Before we begin, I make an assumption that you've already seen your family doctor or perhaps a specialist and despite their best efforts and the prescription of various pain medications, you are still in pain.

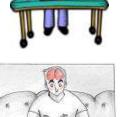
You doctor may have also sent you for complete blood work, an x-ray or maybe an MRI and nothing serious has been found, which may be more frustrating since you are still experiencing pain.

You may have also had various treatments from other caring health care professionals such as physical therapists, massage therapists, or chiropractors and their treatments may have given you temporary relief, but you are still in pain.

So why watch this video?

Did you know that there is now encouraging scientific evidence that simply learning about how pain works can reduce stress, anxiety and pain levels in those coping with what is known as chronic pain?





There are thousands of books and medical research studies on the topic of pain and only in the past 10 years it has been shown that people who are experiencing persistent pain experience improvements in their pain, mood, hopefulness and their ability to move when they receive therapeutic neuroscience pain education.



Some excellent reference books will be provided at the end of this talk. So here is *The Pain* Truth...and Nothing But!



Let's begin with the important fact that pain is actually good, at least most of the time. For instance, if you put your hand on a hot stovetop, danger messages are sent up the spinal cord to the brain. The brain then interprets these messages as "pain" and sends a message back down to get your muscles to quickly remove your hand.



If we didn't feel pain, the body wouldn't be protected from all the dangers out there. Therefore pain is crucial to our survival.



Pain is also good because when a part of a body is injured- say an ankle or a back- pain warns us to protect the area for a few days or weeks to allow the tissues to heal.



Think of pain as a warning signal similar to a home alarm system; it tells the brain to take action and do something.



Do this simple experiment: take your index finger and bend it backwards until you feel some discomfort. Notice that the pain warned you to stop before you caused an injury ...once again, pain is good.

There is one small challenge though: the brain can also produce pain even if there is no risk of tissue damage or when the tissues that were originally injured have fully healed.



Did you know that 70% of all those who lose a body part such as after a leg amputation still feel sensations such as itching, burning and even severe pain in their non-existent leg?

This is referred to as **phantom limb pain.** This phantom pain can be felt by those who lose a finger, an arm or breast.



So why does this happen? Why would the brain make us feel pain in a part of a body that doesn't even exist?

In 1951, *Dr. Penfield*, a pioneering neurosurgeon and a professor at McGill University in Montreal discovered the fact that every single part of our body is mapped out in the brain.



In other words, your brain has an image of your back, neck, legs and toes all perfectly mapped out. This map in the brain is called the **Homunculus**.

What scientists have now discovered is that the image in the brain is all that is needed to produce pain, even if the body part is no longer injured, or no longer even there! What you need to know is that this body map in our brain (or the Homunculus) is constantly changing and can change based on how we use (or don't use) our body.



For instance, violinists have a larger representation of their left hand in their brain, while those who are visually impaired and read brail have a much greater representation of their fingertips in their brain.



Scientists around the world are discovering that pain doesn't always mean that something is injured or damaged in the body.

As we've already discussed, people can feel leg pain even without a leg and trying to eliminate pain in a part of the body that is no longer there is obviously frustrating for patients and doctors. People can also feel back or neck pain even when doctors can't find anything seriously wrong. Trying to eliminate persistent pain by treating the actual area of pain is also often frustrating for patients and doctors.



Let's do a short review of some facts about pain

Fact #1: The brain produces pain, and can so even if there is no actual injury to the body

Fact #2: Pain does not necessarily mean that something in the body is injured

Fact #3: Pain can persist even when the tissues that were originally injured have healed

By this time in my talk, you may be asking yourself: "is this guy telling me that my pain is in my head?"

The answer is yes, all pain is in head or in other words in the brain. The simple proof is that it is possible to feel leg pain without a leg, but no one can feel leg pain without a brain. In all seriousness, I must emphasize that all pain is real. Is the pain that people feel after an amputation real? Of course. So here are 2 more facts.

Fact #4: All pain is real... there is no such thing as imagined pain

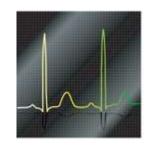
Fact #5: All pain is in the brain

Remember our guy who put his hand on a hot stove? That was obvious danger. However, fascinating studies show that if a person believes the stove is hot and is told that it's hot and it's red in colour, they will still feel burning, even if the stovetop is ice cold.

Why? Because the brain is very powerful. If the brain believes something to be true, it will do everything to prove itself right. In other words, if the brain believes something is dangerous - such as bending forward, walking for a long time, lifting arms over head - it will produce pain to simply protect you and your body part.



**Fact #6:** Pain is an alarm system that warns the body of actual or perceived danger Most people are aware that thoughts and fears can increase blood pressure, increase heart rate and cause muscle tension or even spasms. If someone is told that their house is on fire or that they have to stand up in front of a crowd and publicly speak, it's very likely that just the thought of it will cause muscle tension and heart palpitations.



Here is a question: is the increased heart rate real? Of course it's real. Is the increased muscle tension real? Of course it is real.

Many people, however, are not aware that just thoughts and fears can actually cause swelling and inflammation. Scientists have done experiments where they asked people with chronic hand pain to close their eyes and to just visualize opening a jar. After the visualization, the patients had increased pain and actual increases in swelling of their hands.



Once again, is the increased swelling real? Of course it's real.

Finally, you need to know that just thoughts and fears can actually cause or increase pain. When pain is caused by our thoughts, is it real? Of course it is real... as real as the increased muscle tension and the increased heart rate.



Now that we are clear that **all pain is real** and that pain is not always related only to an actual injury, you may be asking yourself, what is causing my pain then? This will be explained in the Part 2 of this video series.

The Pain Truth and Nothing But! full workbook is available on www.amazon.ca

## Based on what you have just learned, please answer the following 10 True or False questions.

1.	The brain can produce pain even if there is no actual injury to the body
	OT OF
2.	Pain does not necessarily mean that something in the body is injured
	OT OF
3.	Pain can persist even when the tissues that were originally injured have
	healed <b>T F</b>
4.	All pain is real; there is no such thing as imagined pain
	OT OF
5.	It is possible to feel pain and have no physical injury or damage to the body
	OT OF
6.	Pain is an alarm system that warns the body of actual or perceived danger
	OT OF
7.	All pain is "in the head" (in the brain)
	OT OF
8.	Thoughts and fears can increase blood pressure, breathing, heart rate,
	muscle tension and spasms
^	Thoughts and forms on acuse on increase qualling /inflammation
9.	Thoughts and fears can cause or increase swelling/inflammation
10.	Just thoughts and fears can actually cause or increase pain $\Box T$ $\Box F$

Note: The answers are all ☑ True!