CLINICAL AND THERAPEUTIC CANNABIS INFORMATION

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INTRODUCTION
Over the years there have been many studies done on cannabis in many parts of the world.

In the United States it has been difficult to keep up with the rest of the world when it comes to studies on cannabis since the U.S Federal Government restricts research on the plant.

With the change in state laws in America there has fortunately been an increase in the amount of studies being conducted on cannabis.

More than 16,000 peer-reviewed articles have been published on the subject of cannabis and its many therapeutic possibilities.
In addition, with the discovery of the human body’s own endocannabinoid system, there has been an explosion in growth of studies on how cannabis and the endocannabinoid system affect human beings.

A review of more than 40 years of conducted clinical trials has proven that cannabinoids found in cannabis have profound abilities in managing and coping with many different debilitating conditions.

Let’s take a look at some areas of the human body that cannabis can help and some of the most common conditions that clinical trials have proven cannabis to be beneficial with.
Chronic pain is defined as “pain that extends beyond the expected period of healing”, and often lasts for months, even years.

There are numerous types of chronic pain, including:

Arthritis, back pain, cancer pain, headaches, head and facial pain, muscle pain, neuropathic pain, reflex sympathetic dystrophy syndrome (RSDS), sciatica, shingles and other painful disorders of the skin, sports injuries, spinal stenosis and surgical pain.

Over 400 million people worldwide have ongoing chronic pain.

The most common treatments for pain include: analgesic pain relievers (aspirin, acetaminophen, and ibuprofen), acupuncture, antidepressants, migraine headache medicines, chiropractic, cognitive and behavioral therapy, electrical stimulation, nerve blocks, opioids, physical therapy and rehabilitation.

Unfortunately, only 3 out of 10 sufferers of chronic pain find relief from over the counter or prescribed pharmaceutical treatment options.

Chronic pain is the most clinically cited use for cannabis to date with thousands of scientific trials completed worldwide.

It has been proven unequivocally that cannabinoids can be used to block the transmission of acute pain.

In addition, when combined with opiate painkillers, cannabis increases the efficacy and can enhance the medicinal effects by up to 1000%.
NEUROPATHIC PAIN

Neuropathic pain is a result of disease in or damage to the nervous system, or also known as the “somatosensory system”.

The human body feels pain, regulates temperature, and has a sense of touch through the nervous system.

Unfortunately, neuropathic pain is often continuous and often is difficult for physicians to treat since the origin of pain is often unidentifiable.

When compared with traditional pharmaceutical medicines that are most commonly used for neuropathic pain, cannabis has been clinically proven to reduce neuropathic pain without causing unwanted side effects such as weight gain and compromising of the immune system.

Cannabis has been clinically proven to be highly useful for treatment of neuropathic pain associated with vascular disease, herpes, multiple sclerosis, and trauma.
Movement disorders affect millions worldwide.

Movement disorders are neurological conditions that affect the speed, fluency, quality, and ease of movement.

Some of the most common movement disorders include the following conditions:

- Ataxia (lack of coordination, often producing jerky movements)
- Cerebral Palsy
- Dystonia (causes involuntary movement and prolonged muscle contraction)
- Huntington's disease (also called chronic progressive chorea)
- Multiple system atrophies (e.g., Shy-Drager syndrome)
- Paraplegia
- Parkinson's disease
- Restless legs syndrome (RLS) and reflex sympathetic dystrophy/periodic limb movement disorder (RSD/PLMD)
- Spinal Cord Injuries
- Strokes
- Tics (involuntary muscle contractions)
- Tourette's syndrome
- Tremors

To date, more than 150 clinical studies and articles have been published on cannabis and its ability to combat the effects of brain trauma, spinal cord injuries, strokes, and neurodegenerative diseases.
Let’s take a deeper look at a few more common conditions that cannabis can help.

**ALZHEIMER’S DISEASE**

Alzheimer’s disease is the most common form of dementia, and there is no cure for it at this time. Alzheimer’s gets worse over time and eventually leads to death.

Numerous studies have shown that cannabidiol (CBD) fights Alzheimer’s by inhibiting the release of beta-amyloid peptide, which is toxic on the human body.

**ARTHRITEI**

Arthritis is a joint disorder that involves one or more joints and the inflammation of them. There are over 100 documented forms of arthritis, with the most common forms being osteoarthritis & rheumatoid arthritis.

The pain from arthritis is due to inflammation that happens around the joint, damage to the joint from disease, tearing of the joint, and muscle strains.

Because cannabis contains powerful anti-inflammatory compounds it works well as an arthritis treatment plan.

Cannabis can relieve joint pain while at the same time reducing the inflammation that arthritis can cause. Rheumatoid arthritis, osteoarthritis, and even juvenile arthritis can be treated with cannabis. Although most parents are hesitant to give a child cannabis for any reason, some parents with children who suffer from arthritis have found that high-cbd strains of cannabis that are low in psychoactive properties have proven to be an effective treatment for their children.

Many other people suffering from arthritis have found relief with cannabis in the form of sublingual ingestion and topical applications.
In the year 2000, researchers found that cannabidiol "effectively blocked progression of arthritis" in animal trials.
Multiple sclerosis (MS) is a disabling disease of the central nervous system that causes blockage with the flow of information within the brain, and between the brain and body.

The cause of MS is still not known. Many scientists believe the disease is triggered by as-yet-unidentified environmental factors in a person who is genetically predisposed to respond.

Recently, the American Academy of Neurology conducted a systematic review of available research analyzing the use of cannabis for the treatment of brain diseases. Through their research they found that cannabis together with cannabidiol profoundly assists with alleviating many of the symptoms associated with Multiple Sclerosis.

Some of the common symptoms that Multiple Sclerosis patients normally experience that cannabis and cannabidiol in pill form showed the most effectiveness with were pain, spasticity, and overactive bladder.
CANCER

Cancer is a group of diseases involving abnormal cell growth. Cancers often spread and invade other parts of the body. There are over 100 different known cancers that affect human beings. Cancer causes 8.5 million deaths worldwide annually.

Recent studies have proven unequivocally that cannabinoids fight cancer cells.

In the year 2000, the International Association for Cannabis as Medicine (IACM) was founded and has since published profound studies on cannabis as a medicine.

In 2001, the Center for Medical Cannabis Research (CMCR) at the University of California, cannabinoids stop certain types of cancers by programmed cell death, also known as “apoptosis”.

Cannabis has shown anti-tumor tendencies in CB1 and CB2 agonists.

The use of cannabinoids in clinical studies has shown anti-tumor activity and the reduction in secondary tumors often associated with cancer.

Chemotherapy can be very toxic on the human body and leaves millions with many unwanted side effects.

Cannabis can dramatically help chemotherapy patients deal with these many side effects, including, loss of appetite, insomnia, pain, and nausea and vomiting.

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