

# PEMF Therapy For Drug Addiction Recovery

According to the National Survey on Drug Use and Health, in 2017, almost 20 million Americans (aged 12 years and older) were dealing with addiction. So, if you or someone you know is struggling with drug addiction, you're not alone.

The good news is that no matter how serious the situation appears to be, most drug users may benefit from some type of treatment. It is, however, not a one-size-fits-all approach, and what works for one individual may not work for another. Drug addiction recovery is a multistep procedure that includes many phases and treatment approaches.

There are various types of therapies, and their effectiveness may vary depending on a person's needs. Lately, some studies have shown that pulsed electromagnetic field (PEMF) therapy may be effective in treating a person with drug addiction. This treatment approach can complement drug withdrawal medications and prevent relapse at a lower cost with fewer side effects.

Before we study the details, let's understand how drug usage affects the body and brain.

## How do drugs affect your body?

Drug addiction, or substance use disorder, is a complicated condition that affects a person's brain and behavior. It makes a person lose control over the use of legal or illegal drugs or medications. Addiction can be caused by common substances, such as alcohol, marijuana, nicotine, and prescribed medications. Drug addiction often begins with trying a substance that eventually turns into frequent and compulsive consumption despite the harm it causes.

## Health problems associated with drug use

When a person becomes addicted to drugs, they may have various health concerns, including physical, mental, and social issues. Drug usage can result in respiratory problems, heart disease, liver damage, and immune system suppression. It can cause anxiety, sadness, cognitive impairment, and changes in brain function. Socially, drug addiction can strain relationships, impair work or academic performance, and lead to legal problems.

## Drug addiction and its impact on the brain

All drugs, whether it's nicotine, cocaine, or marijuana, affect a part of your brain called the "reward" circuit, which is linked to your instincts and mood. When a person uses a drug, it targets the reward circuit, causing a rush of dopamine, a chemical that helps control your emotions and pleasure sensations. This dopamine surge gives a person the feeling of being "high" and is a major reason why people get addicted to drugs.

Even though a person might start using drugs by choice, the chemicals in drugs can change the functioning of the brain. This can disrupt their ability to make the right decisions. It often leads to strong cravings for the drug and uncontrollable drug use. Prolonged drug use also affects brain structure and function, affecting memory, decision-making, and emotional regulation.

## **Alcohol's impact on the brain**

Alcohol, too, has acute and long-term effects on the brain. It disrupts how the brain's messaging system works, which eventually affects a person's mood, behavior, and other mental abilities.

Excessive alcohol use can lead to brain damage due to nutrition deficiencies, seizures, and liver disease. In pregnant women, alcohol exposure can harm the brains of unborn babies, causing a range of issues known as fetal alcohol spectrum disorders.

## **What are the effects of drug and alcohol abstinence on your brain and body?**

Addiction to any substance affects your brain, and a lot of effort is required to restore it to its normal state. The amount of drugs or alcohol consumed is directly proportional to the damage it causes your brain.

When you quit taking drugs or drinking alcohol, your body and brain go through significant changes. The brain, which has adapted to the presence of drugs, struggles to regain balance, resulting in withdrawal symptoms. These symptoms can be intense and may include anxiety, irritability, insomnia, fatigue, and, in severe cases, seizures.

## **How does PEMF therapy aid in drug addiction recovery?**

PEMF therapy involves exposure to specific frequencies of electromagnetic waves that stimulate cellular processes and promote healing. The treatment can be a valuable adjunct therapy to support the recovery process.

Withdrawal from a drug addiction can be a physically and emotionally exhausting experience. The symptoms often include intense cravings, nausea, muscle aches, anxiety, depression, and a profound sense of restlessness and agitation. The process can feel like a relentless battle, where the body and mind crave the substance for which they have become accustomed to, making the recovery process challenging.

When you try to quit drugs or alcohol without the help of professionals, you are likely to relapse because of the physical or psychological withdrawal symptoms that often occur with it.

PEMF therapy for addiction can evoke a better sense of calmness and well-being. The fewer the withdrawal symptoms, the better the recovery. Fewer withdrawal symptoms can help you quit and prevent relapse.

## The benefits of PEMF therapy for drug addiction recovery

Although PEMF therapy is not a cure for drug addiction, it can offer a number of benefits that will help combat various issues associated with drug addiction. These include:

### 1. Pain management

Drug withdrawal can cause a myriad of side effects, including body aches, which can impair movement. PEMF therapy is known to have analgesic (pain-relieving) effects by enhancing blood circulation and reducing inflammation. The treatment may help in managing these withdrawal symptoms. It can make you feel better and help your body heal faster.

### 2. Enhanced cellular function and healing

PEMF therapy increases cellular function by increasing the number of electrolytes and ions in your cells. This affects electrical alterations and cellular metabolism, restoring normal electrical currents and supporting optimal cellular function. This may be beneficial for individuals in recovery, as it could support the healing of tissues and organs that may have been damaged due to substance abuse.

### 3. Enhanced mood and mental well-being

Protracted withdrawal symptoms may cause mental health issues, such as anxiety and depression. PEMF therapy has been shown to help relieve stress and anxiety. Stress is a major trigger for drug use and relapse, so using PEMF therapy in a comprehensive treatment plan improves mental health during recovery.

PEMF also stimulates the production of endorphins, the body's natural mood enhancers. This can be really helpful in recovering from substance abuse, as it can help adopt more positive mindsets and reduce irritability.

## 4. Increased energy levels

It is common to experience extreme fatigue at the beginning of recovery since the body is repairing itself, which requires time and energy. PEMF therapy activates the powerhouse of cells, called mitochondria, which produces the energy required for cell functions. These effects may indirectly support individuals in their recovery journey by providing energy and motivation to continue with their rehabilitation efforts.

## 5. Improved sleep quality

Sleep problems are common withdrawal symptoms for people addicted to drugs and alcohol. Trouble sleeping can make recovery more complex. PEMF therapy uses specific electromagnetic frequencies to influence the electrical activity in the brain. When the body is exposed to these low-frequency electromagnetic fields, the brain tends to synchronize with them. This synchronization helps shift the brain into a state of deep relaxation, which helps regulate the natural sleep-wake cycle and promote better sleep.

## 6. Cognitive function and brain health

Research suggests that PEMF therapy can support brain health by promoting neuroprotection and enhancing cognitive function. The treatment may have positive effects on brain function and may help rebalance neurotransmitters. Given that addiction causes changes in the brain, PEMF therapy could potentially aid in restoring balance.

# Why is PEMF therapy important in treating drug addiction?

PEMF therapy uses a holistic approach to help people focus on both mind and body. It is an innovative and creative method of assisting addiction treatment. The changes that PEMF causes in your body help eliminate toxins faster, leading to healthier cells and tissues and better blood quality. Detoxification is essential in drug recovery because drugs leave harmful substances in the body. Clearing these toxins supports the body's

natural healing processes, reduces cravings, and helps in overcoming their addiction and staying sober for a long term.

## Takeaway

By using electromagnetic fields to stimulate cellular function and potentially rebalance brain chemistry, PEMF may help alleviate some of the distressing symptoms of drug withdrawal. It could provide relief from physical discomfort, ease anxiety, and promote better sleep, making the recovery process more manageable.

## References

- Larsen ER, Licht RW, Nielsen RE, et al. Transcranial pulsed electromagnetic fields for treatment-resistant depression: A multicenter 8-week single-arm cohort study. *Eur Psychiatry*. 2020;63(1):e18. doi:10.1192/j.eurpsy.2020.3
- Shealy C, Sorin S, Cassady L. Gamma PEMF therapy: a pilot study for its use in managing opioid addiction. *Pract Pain Manag*. 2019;19(6).