Meta Description: Medication Assisted Treatment can help with many types of addiction. How does it work? This article will help you learn how it can change your life.

Medication Assisted Treatment

Opioid use disorder and dependence is a serious problem in the United States. According to the CDC, there were an estimated 75,673 deaths from opioid abuse between April 2020 and April 2021. This is an increase from 56,064 the year prior₁. With the number of overdoses increasing each year, more needs to be done to assist people with substance use disorders.

What can be done to curb this trend? MAT or Medication Assisted Treatment can be the answer.

What is Addiction?

Addiction is a chronic illness that involves complex interactions among brain circuits, environment, genotype, and life experiences. People with addiction often continue to use substances or engage in behaviors despite the harmful outcomes₂.

Addiction is treatable just like other diseases but can be difficult due to the impact of the environment and lifestyle of the illness.

Drug Addiction

Drug addiction is also referred to as substance use disorder. The disease affects the brain in a way that leads to the inability to control urges to use legal and illegal drugs. It can often begin with recreational use at a younger age, in social instances, or even with prescriptions to treat other ailments such as pain.

Addiction becomes an issue based on the frequency of use and the drug itself. For example, some drugs like opioids are proven to be abused more often due to their chemical makeup.

Commonly Abused Drugs

Some of the most commonly abused substances are legal, making them easier to access and more prone to abuse.

The top abused drugs according to SAMHSA₃ include:

Nicotine

- Alcohol
- Marijuana
- Painkillers Codeine, Vicodin, Oxycontin
- Cocaine
- Heroin
- Benzodiazepines
- Stimulants Adderall, Ritalin, Meth
- Inhalants
- Barbiturates Sleeping Pills

Alcohol Addiction

One of the most common addictions in the United States is alcohol. It is available almost anywhere, making it easier to abuse than illegal drugs. Most adults will consume alcohol at some point in their lives. As many as 95,000 Americans die each year from the effects of alcohol use₄, making it one of the most common causes of death in the United States.

Alcohol use disorder is a medical condition characterized by an impaired ability to stop or control alcohol use despite adverse social, occupational, or health consequences. Mild, moderate, and severe are considered different levels of the condition.

Some people are at a higher risk for alcohol abuse than others. Some of these factors include:

- Prior mental health issues
- Genetics or family history of alcoholism
- Starting to drink at a young age

Statistics on Different Types of Addiction

To put everything into perspective, here are some statistics dealing with the different types of addictions:

- 11.7% of Americans aged 12 and over use illegal drugs₅
- 22% of males and 17% of females used illicit drugs or misused prescription drugs within the last year₅
- People aged 18-25 are most likely to use drugs with 39% compared to persons aged 26-29, at 34%₅.
- Hydrocodone is the most popular prescription opioid, with 5.1 million misusers₅
- The number of overdose deaths increases at an annual rate of 4.0%₅.
- 9.7 million or 96.6% of opioid misusers use prescription pain relievers.

Signs and Symptoms of Addiction

There are many signs of addiction that are easy to ignore or that you might not even correlate with drug abuse. For example, there can be changes in moods, sleep patterns, hygiene, and financial issues.

Here is a list of the more common behaviors to look for in someone you suspect of drug abuse:

- Money Troubles requests to borrow money, maxed out credit cards, selling valuable items, stealing.
- Physical Issues changes in weight and appearance.
- Behavioral Changes distancing from family and friends in favor of other new friends, being secretive about where they are going.
- Problems with their Job frequent absence, poor work performance, being fired.

Signs of Alcoholism

Some people are affected by alcohol use disorders and might not even be aware they have a problem. If you have any doubts about whether you have a problem with alcohol or not, ask yourself the following questions:

- Have you wanted a drink badly enough that you were preoccupied with the thought?
- Have you been told by friends and family you should cut back on the amount you drink?
- Do you tend to drink more than you had planned?
- Do you choose to drink over other activities that you used to enjoy?
- Kept drinking even after finding out you have a medical condition?
- Do you experience withdrawal symptoms when you stop drinking?
- Do you need to drink more and more to achieve the same feeling?
- Have you lost a job or friends due to drinking alcohol?

Signs of Drug Addiction

Drug addiction signs come in many shapes and sizes, including physical, behavioral, and psychological. Here are some of the warning signs of drug addiction:

- Changes in behavior include becoming more reckless, neglecting work, and getting into trouble with the law₇.
- Physical changes include changes in eating habits, sleep patterns, bloodshot eyes, pupil dilation, and smelling bad₇.
- Some psychological changes include mood swings, anxiety, depression, personality change, and paranoia₇.

The Dangers of Substance Abuse

Substance abuse impacts more than just the person using drugs. For example, drug abuse can cause mental disorders, increased risk of HIV, congenital disabilities, spreading of disease, and increased motor vehicle accidents₈.

Health Impacts of Alcoholism

People tend to underestimate the long-term effects of alcohol abuse. Here are just a few of the more common issues you can develop when abusing alcohol₇:

- Liver Disease Drinking too much alcohol can cause liver damage. This can result in inflammation of the liver, fat build-up in the liver, and, over time, irreversible destruction and scarring of liver tissue.
- Diabetic Complications In addition to lowering blood sugar levels, alcohol can increase
 the risk of low blood sugar. This is dangerous if you have diabetes and already take
 insulin to lower your blood sugar level.
- Birth Defects Drinking when pregnant can lead to a miscarriage. Alcohol can also cause a baby to be born with fetal alcohol syndrome, resulting in a lifetime of physical and developmental ailments for the child.
- Higher Risk of Cancer Alcohol use over the long term has been linked with an increased risk of many cancers, including mouth, throat, liver, esophagus, colon, and breast cancers.
- Neurological Issues Excessive drinking can affect your nervous system, causing numbness and pain in your hands and feet, disordered thinking, dementia, and short-term memory loss.

Alcohol Poisoning Signs

Drinking a lot is one thing, but drinking to the point of poisoning can speed up the adverse effects and even cause death. That is why medication assisted treatment for alcohol is recommended. Remember, alcohol poisoning is an emergency.

Call 911 if you experience any of these symptoms:

- Confusion
- Vomiting
- Seizures
- Slow breathing or Irregular Breathing
- Blue-tinged skin or pale skin

- Low body temperature
- Falling unconscious and can't be woken up₈

Health Impacts of Drugs

Just like with alcohol, there are many long-term effects of drug abuse.

Some of the issues that can arise include:

- Cardiovascular disease
- Stroke
- Cancer
- HIV/AIDS
- Hepatitis B and C
- Lung disease
- Mental disorders₉

Drug Overdose Signs

When drugs go too far, you can be susceptible to a drug overdose. These are very serious and are an emergency.

Anyone experiencing these symptoms should call 911:

- Chest pain
- Nausea and vomiting
- Seizures
- Agitation
- Sever breathing issues
- Sign of a blocked airway
- Convulsions
- Paranoia
- High body tempurature

The Opioid Epidemic

Drug overdose is now the leading cause of accidental death in the United States, largely due to the Opioid epidemic. The Opioid epidemic refers to the number of deaths and hospitalizations from different opioid drugs, including prescription and illicit drugs. Over the last few years, death rates for these drugs have skyrocketed to over 40,000 a year or 115 a day across the US.

What are Opioids?

Opioids are a class of drugs found in the poppy that work in the brain to produce effects like pain relief. Opioids can be prescription medications like pain killers or illegal street drugs such as heroin.

Many prescription opioids are prescribed for moderate to severe pain. They may also cause people to feel relaxed, happy, or "high," and they can be addictive. Side effects can include slowed breathing, constipation, confusion, and drowsiness₁₀.

Some of the most common opioids in use today include:

- OxyContin
- Vicodin
- Fentanyl
- Heroin

Why Are Opioids Addictive?

Opioids release endorphins, your brain's feel-good neurotransmitters. Endorphins dull your perception of pain and boost feelings of pleasure, creating a temporary but powerful sense of well-being. However, after the effects wear off, you may find yourself wanting those good feelings back as soon as possible₁₁.

Statistics on Opioid Abuse

- In 2019, nearly 50,000 people in the United States died from opioid-involved overdoses₁₁
- The Centers for Disease Control and Prevention estimates that the total "economic burden" of prescription opioid misuse alone in the United States is \$78.5 billion a year₁₁.
- Roughly 21 to 29 percent of patients prescribed opioids for chronic pain misuse them₁₁
- About 80 percent of people who use heroin first misused prescription opioids₁₁.
- Between 8 and 12 percent of people using an opioid for chronic pain develop an opioid use disorder_{11.}

The Dangers of Opioid Use

The dangers of opioid abuse can't be overstated. Each day more people are becoming dependent on opioids leading to this epidemic. In addition to being addicted, you can

experience withdrawals when you stop taking opioids. Also, overdosing on opioids happens frequently. That is why medication assisted treatment for opioid use disorder is recommended.

Withdrawal Symptoms

When you stop taking any drug, your body needs time to adjust to functioning without the drug in your bloodstream. You may experience withdrawal symptoms during the process. These can be fairly unpleasant and include:

- Shakiness
- Sleep problems
- Vomiting and diarrhea
- Leg spasms
- Cavings for opioids
- Clod flashes
- Body pain₁₂

The FDA has approved using an NSS-2 Bridge that is placed behind a person's ear and can help with the withdrawal symptoms₁₂.

Overdose Symptoms

When someone has had too much of an opioid, they can suffer from an overdose. An overdose occurs whenever the body is overwhelmed by the amount of the drug in your system. They usually happen accidentally after heavy drug use. Some telltale signs of an opioid overdose include:

- Changes in body temperature
- Irregular pulse
- Skin changes
- Passing out
- Unsteady breathing

What is Medication Assisted Treatment?

Medication Assisted Treatment is for people with opioid addictions to help them stop using substances. MAT combines a prescription drug, a counseling session, and behavioral therapy. This type of treatment offers a whole-person approach to treating substance use disorder.

MAT treatment drugs include methadone, buprenorphine, and injectable naltrexone. The medication helps normalize brain chemistry, block out the pleasurable effects of alcohol and

opioids, reduce cravings for these substances, and normalize bodily functions without producing some of the adverse effects of using them₁₃.

A combination of medications and therapy is an effective way to help people with these disorders. For some people struggling with addiction, MAT therepy can also help them stay sober and stay out of relapse₁₃.

MAT Effectiveness

Medication Assisted Treatment has been proven to help those in need of opioid addiction treatment. Medication Assisted Treatment program for opioid use disorder helps reduce the need for inpatient detox programs and help to address behavioral issues that plague people with opioid dependency. MAT treatment has been shown to:

- Increase patient recovery survival rate
- Help people stay in treatment
- Curb illegal opioid use
- Help opioid users with employment issues
- Improve the health of babies born from those with substance use disorders.

MAT Medications

The FDA has approved drugs for MAT treatment. These include acamprosate, disulfiram, buprenorphine, methadone, and naltrexone. In addition, providers should offer patients counseling and psychosocial support, along with access to medications that you can take together with counseling.

The duration of MATs should be re-evaluated periodically due to the chronic nature of OUD. Some patients may be on medically assisted treatment indefinitely, without a maximum recommended duration.

For Alcohol Abuse

The medications most commonly used for Medication Assisted Treatment for alcohol abuse are acamprosate, disulfiram, and naltrexone₁₃. While these are not a cure for alcohol dependency, they can help those who take them in correlation with an MAT program.

For Opioid Abuse

Buprenorphine, methadone, and naltrexone are used to treat opioid use disorders to short-acting opioids such as heroin, morphine, and codeine, as well as semi-synthetic opioids like oxycodone and hydrocodone. These MAT therapy medications are safe to use for months or years. Opioid treatment programs will work with the medication for best results.

For Other Substances

MAT treatments and medication are available for those with tobacco use disorder. The medication falls into two main types, Bupropion and Varenicline.

Some of the medications that are commonly prescribed to supplement MAT are:

- Wellbutrin
- Zyban
- Aplenzin
- Bupropion
- Budeprion
- Forfivo
- Chantix

Commonly Asked Questions about MAT

How Long does MAT Take?

Medication Assisted Treatment programs vary from person to person. For example, someone with a severe addiction to opioids will need much more time than someone who abused painkillers for a couple of months. This is why MAT therapy is an effective option. With no one-size-fits-all approach, each person can get the individual treatment they need.

A patient with a more mild abuse pattern can be fine after a few months, but long-term users might need one to two years of treatment.

Are Medication Assisted Treatment Medications Safe?

Yes, the MAT program only uses FDA-approved medications, so there is no need to worry about an experimental treatment that may have adverse side effects.

Are MAT Medications Addictive?

No, the medications prescribed are designed to curb cravings for drugs and help the body recover. They don't have any addictive properties and work to change brain chemistry. This helps you to avoid relapse by returning your brain to normal.

Are you Replacing One Drug with Another?

No, Methadone and buprenorphine do not result in the patient developing an addiction to the medication during a MAT program. Methadone and buprenorphine help reduce cravings and withdrawals from opioids and restore the balance in brain circuits, allowing it to heal while recovering.

Additional Treatment Options

Therapies

Aside from MAT, therapy can help those with addiction issues. This typically won't involve medication but helps you understand your addiction by finding the root cause and addressing any reasons you are prone to drug abuse.

Support Groups

Support groups are another way to get help. Meetings like AA and NA can help give you a look into the lives of others with drug problems and help you understand what you can do to combat addiction.

Rehabilitation

Of course, rehab is an option; the biggest issue with rehab is that it tends to be more of a one-and-done treatment where MAT is a long-term solution.

Inpatient Care

Inpatient care is an option that will isolate you to a rehab center where 24/7 treatment is available. Inpatient rehab consists of medically assisted detox, medical assistance with withdrawals, therapy, and emotional care.

The typical time spent in rehab is 28-days, but some people need up to six months to get clean.

Outpatient Care

Outpatient care is ideal for those who cant cut themselves off from the world. Most outpatient treatment is done at a treatment center for several hours a day. This can include detoxing, physical and mental health checks.

Outpatient care will typically be less expensive than inpatient care, making it a popular choice.

Resources

- 1. <u>Drug Overdose Deaths in the US Top 100,000 Annually</u>.
- 2. Definition of Addiction
- 3. 2020 National Survey of Drug Use and Health (NSDUH) Releases | CBHSQ Data
- 4. Alcohol Abuse Statistics [2022]: National + State Data NCDAS
- 5. Drug Abuse Statistics
- 6. Alcohol use disorder Symptoms and causes Mayo Clinic
- 7. Warning Signs of Drug Abuse
- 8. Alcohol poisoning Symptoms and causes Mayo Clinic
- 9. Addiction and Health | National Institute on Drug Abuse (NIDA)
- 10. What Are Opioids?
- 11. How opioid addiction occurs Mayo Clinic
- 12. Prescription Opioids DrugFacts | National Institute on Drug Abuse (NIDA)
- 13. Medication-Assisted Treatment (MAT) | SAMHSA

Infographic Facts

- An estimated 16.9% of adults aged 18 or older in 2020 (or 41.4 million people) received inpatient or outpatient mental health services or took prescription medication for a mental health issue in the past year
- In 2020, 14.9% of people aged 12 or older (or 41.1 million people) were classified as needing substance use treatment in the past year. These findings were consistent with the SUD data.
- 7% of Drinking Adults have AUD.
- 60% of People increased their alcohol consumption during COVID-19 lockdowns.