



LEARNING MODULE I

Seminar # 30

Medical Assisted Treatments (M.A.T.)

Learning Objectives

1. What is the issue.
2. How can the issue impact the family.
3. What are the options.

What is the issue?

Medication-Assisted Treatment (M.A.T.) is the use of medications, in combination with counseling and behavioral therapies, to provide a “whole-patient” approach to the treatment of substance use disorders. Research shows that a combination of medication and therapy can successfully treat these disorders, and for some people struggling with addiction, M.A.T. can help sustain recovery. Learn about many of the substance use disorders that M.A.T. is designed to address.

M.A.T. is primarily used for the treatment of addiction to opioids such as heroin and prescription pain relievers that contain opiates. The prescribed medication operates to normalize brain chemistry, block the euphoric effects of alcohol and opioids, relieve physiological cravings, and normalize body functions without the negative effects of the abused drug. Medications used in M.A.T. are approved by the Food and Drug Administration (FDA), and M.A.T. programs are clinically driven and tailored to meet each patient’s needs. Combining medications used in M.A.T. with anxiety treatment medications can be fatal. Types of anxiety treatment medications include derivatives of Benzodiazepine, such as Xanax or valium.

Opioid Treatment Programs (OTPs)

Opioid treatment programs (OTPs) provide M.A.T. for individuals diagnosed with an opioid use disorder. OTPs also provide a range of services to reduce, eliminate, or prevent the use of illicit drugs, potential criminal activity, and/or the spread of infectious disease. OTPs focus on improving the quality of life of those receiving treatment.

OTPs must be accredited by a SAMHSA-approved accrediting body and certified by SAMHSA. The Division of Pharmacologic Therapies (DPT), part of the SAMHSA Center for Substance Abuse Treatment (CSAT), oversees accreditation standards and certification processes for OTPs. Learn more about the certification of OTPs and SAMHSA’s oversight of OTP Accreditation Bodies.

Federal law requires patients who receive treatment in an OTP to receive medical, counseling, vocational, educational, and other assessment, and treatment services, in addition to prescribed medication. The law allows MAT professionals to provide treatment and services in a range of settings, including hospitals, jails, offices, and remote clinics. Learn more about the legislation, regulations, and guidelines that govern OTPs.

As of 2015, OTPs were in every U.S. state except North Dakota and Wyoming. The District of Columbia and the territories of Puerto Rico and the Virgin Islands also had OTPs in operation.

How can the issue impact the family?

Under federal law, M.A.T. patients must receive counseling, which could include different forms of behavioral therapy. These services are required along with medical, vocational, educational, and other assessment and treatment services. Learn more about these treatments for substance use disorders.

What are the options?

In 2013, an estimated 1.8 million people had an opioid use disorder related to prescription pain relievers, and about 517,000 had an opioid use disorder related to heroin use. M.A.T. has proved to be clinically effective and to significantly reduce the need for inpatient detoxification services for these individuals. M.A.T. provides a more comprehensive, individually tailored program of medication and behavioral therapy. M.A.T. also includes support services that address the needs of most patients.

The goal of M.A.T. is full recovery, including the ability to live a self-directed life. This treatment approach has been shown to:

- Improve patient survival.
- Increase retention in treatment.
- Decrease illicit opiate use and other criminal activity among people with substance use disorders.
- Increase patients' ability to gain and maintain employment.
- Improve birth outcomes among women who have substance use disorders and are pregnant.

Research also shows that these medications and therapies can contribute to lowering a person's risk of contracting HIV or hepatitis C by reducing the potential for relapse. Learn more about substance misuse and how it relates to HIV, AIDS, and Viral Hepatitis. Learn more about common comorbidities that occur with substance use disorders.

Unfortunately, M.A.T. is greatly underused. For instance, according to SAMHSA's Treatment Episode Data Set (TEDS) 2002-2010, the proportion of heroin admissions with treatment plans that included receiving medication-assisted opioid therapy fell from 35% in 2002 to 28% in 2010. The slow adoption of these evidence-based treatment options for alcohol and opioid dependence is partly due to misconceptions about substituting one drug for another. Discrimination against MAT patients is also a factor, despite state and federal laws clearly prohibiting it. Other factors include lack of training for physicians and negative opinions toward MAT in communities and among health care professionals.

M.A.T. and Patient Rights

SAMHSA's Partners for Recovery Initiative produced a brochure designed to assist M.A.T. patients and to educate and inform others.

Under the Confidentiality Regulation, 42 Code of Federal Regulations (CFR) 2, personally identifiable health information relating to substance use and alcohol treatment must be handled with a higher degree of confidentiality than other medical information.

Medications Used in M.A.T.

FDA has approved several different medications to treat opioid addiction and alcohol dependence.

A common misconception associated with MAT is that it substitutes one drug for another. Instead, these medications relieve the withdrawal symptoms and psychological cravings that cause chemical imbalances in the body. MAT programs provide a safe and controlled level of medication to overcome the use of an abused opioid. And research has shown that when provided at the proper dose, medications used in MAT have no adverse effects on a person's intelligence, mental capability, physical functioning, or employability.

Medications used in M.A.T. for opioid treatment can only be dispensed through a SAMHSA-certified OTP. Some of the medications used in M.A.T. are controlled substances due to their potential for misuse. Drugs, substances, and certain chemicals used to make drugs are classified by the Drug Enforcement Administration (DEA) into five distinct categories, or schedules, depending upon a drug's acceptable medical use and potential for misuse. Learn more about DEA drug schedules.

Opioid Dependency Medications

Methadone, buprenorphine, and naltrexone are used to treat opioid dependence and addiction to short-acting opioids such as heroin, morphine, and codeine, as well as semi-synthetic opioids like oxycodone and hydrocodone. People may safely take medications used in MAT for months, years, several years, or even a lifetime. Plans to stop a medication must always be discussed with a doctor.

Methadone

Methadone tricks the brain into thinking it is still getting the abused drug. In fact, the person is not getting high from it and feels normal, so withdrawal does not occur. Learn more about methadone. Used for decades as a medication-assisted treatment (M.A.T.) for addiction to heroin and narcotic pain medication, methadone helps people sustain long-term success and to reclaim active and meaningful lives.

How Does Methadone Work?

Methadone reduces opioid craving and withdrawal and blunts or blocks the effects of opioids. Methadone, taken once a day, is available in various forms such as liquid, powder, tablets, and diskettes. As with all medications used in medication-assisted treatment (M.A.T.), methadone is prescribed as part of a comprehensive treatment plan that includes counseling and participation in social support programs.

How Can a Patient Receive Methadone?

Patients taking methadone to treat OUD must receive the medication under the supervision of a physician. After a period of stability (based on progress and proven, consistent compliance with the medication dosage), patients may be allowed to take methadone at home between program visits. By law, methadone is only dispensed through a SAMHSA-certified opioid treatment program (OTP).

The length of time in methadone treatment varies from person to person. According to the National Institute on Drug Abuse (NIDA) publication *Principles of Drug Addiction Treatment: A Research-Based Guide – 2012* (PDF | 391 KB), the length of methadone treatment should be a minimum of 12 months. However, some patients may require long-term maintenance. Patients must work with M.A.T. physician to gradually reduce their methadone dosage to prevent withdrawal.

Pregnant or breastfeeding women must inform their treatment provider before taking methadone. It is the only drug used in M.A.T. approved for women who are pregnant or breastfeeding. Learn more about pregnant or breastfeeding women and methadone.

Buprenorphine:

Like methadone, buprenorphine suppresses and reduces cravings for the abused drug. It can come in a pill form or sublingual tablet that is placed under the tongue. Learn more about buprenorphine. Approved for clinical use in October 2002 by the Food and Drug Administration (FDA), medications such as buprenorphine, in combination with counseling and behavioral therapies, provide a whole-patient approach to the treatment of opioid dependency. When taken as prescribed, buprenorphine is safe and effective.

Unlike methadone treatment, which must be performed in a highly structured clinic, buprenorphine is the first medication to treat opioid dependency that is permitted to be prescribed or dispensed in physician offices, significantly increasing treatment access. Under the Drug Addiction Treatment Act of 2000 (DATA 2000), qualified U.S. physicians, and mid-level practitioners with an X-license can offer buprenorphine for opioid dependency in various settings, including in an office (physicians only), community hospital, health department, or jail (mid-level practitioners). Learn more about SAMHSA's buprenorphine waiver management.

SAMHSA-certified opioid treatment programs (OTPs) also can offer buprenorphine, but only are permitted to dispense treatment. Learn more about certification of OTPs.

As with all medications used in M.A.T., buprenorphine is prescribed as part of a comprehensive treatment plan that includes counseling and participation in social support programs.

Buprenorphine offers several benefits to those with opioid dependency and to others for whom treatment in a methadone clinic is not preferred or is less convenient. The FDA has approved the following buprenorphine products:

- Bunavail (buprenorphine and naloxone) buccal film
- Suboxone (buprenorphine and naloxone) film
- Zubsolv (buprenorphine and naloxone) sublingual tablets
- Buprenorphine-containing transmucosal products for opioid dependency

Refer to the product websites for a complete listing of drug interactions, warnings, and precautions.

How Buprenorphine Works:

Buprenorphine has unique pharmacological properties that help:

- **Lower the potential for misuse.**
- Diminish the effects of physical dependency to opioids, such as withdrawal symptoms and cravings.
- Increase safety in cases of overdose.

Buprenorphine is an opioid partial agonist. This means that, like opioids, it produces effects such as euphoria or respiratory depression at low to moderate doses. With buprenorphine, however, these effects are weaker than full opioid agonists such as heroin and methadone.

Buprenorphine's opioid effects increase with each dose until at moderate doses they level off, even with further dose increases. This "ceiling effect" lowers the risk of misuse, dependency, and side effects. Also, because of buprenorphine's long-acting agent, many patients may not have to take it every day.

Naltrexone:

Naltrexone works differently than methadone and buprenorphine in the treatment of opioid dependency.

If a person using naltrexone relapses and uses the abused drug, naltrexone blocks the euphoric and sedative effects of the abused drug and prevents feelings of euphoria. [Learn more about naltrexone.](#)

Naltrexone is a medication approved by the Food and Drug Administration (FDA) to treat opioid use disorders and alcohol use disorders. It comes in a pill form or as an injectable. The pill form of naltrexone (ReVia, Depade) can be taken at 50 mg once per day. The injectable extended-release form of the drug (Vivitrol) is administered at 380 mg intramuscular once a month.

Naltrexone can be prescribed by any health care provider who is licensed to prescribe medications.

To reduce the risk of precipitated withdrawal, patients are warned to abstain from illegal opioids and opioid medication for a minimum of 7-10 days before starting naltrexone. If switching from methadone to naltrexone, the patient must be completely withdrawn from the opioids.

When used as a treatment for alcohol dependency, naltrexone blocks the euphoric effects and feelings of intoxication. This allows people with alcohol addiction to reduce their drinking behaviors enough to remain motivated to stay in treatment, avoid relapses, and take medications. [Learn more about how naltrexone is used to treat alcohol dependency.](#)

How Naltrexone Works:

Naltrexone blocks the euphoric and sedative effects of drugs such as heroin, morphine, and codeine. It works differently in the body than buprenorphine and methadone, which activate opioid receptors in the body that suppress cravings. Naltrexone binds and blocks opioid receptors and is reported to reduce opioid cravings. There is no abuse and diversion potential with naltrexone.

If a person relapses and uses the problem drug, naltrexone prevents the feeling of getting high. People using naltrexone should not use any other opioids or illicit drugs; drink alcohol; or take sedatives, tranquilizers, or other drugs.

If patients on naltrexone discontinue use, they may have reduced tolerance to opioids and may be unaware of their potential sensitivity to the same, or lower, doses of opioids that they used to take. If patients who are treated with naltrexone relapse after a period of abstinence, it is possible that the dosage of opioid that was previously used may have life-threatening consequences, including respiratory arrest and circulatory collapse.

As with all medications used in medication-assisted treatment (M.A.T.), naltrexone is to be prescribed as part of a comprehensive treatment plan that includes counseling and participation in social support programs.

Opioid Overdose Prevention Medication:

FDA approved naloxone; an injectable drug used to prevent an opioid overdose. According to the World Health Organization (WHO), naloxone is one of several medications considered essential to a functioning health care system.

Alcohol Use Disorder Medications:

Disulfiram, acamprosate, and naltrexone are the most common drugs used to treat alcohol use disorder. None of these drugs provide a cure for the disorder, but they are most effective in people who participate in a M.A.T. program. Learn more about the impact of alcohol misuse.

Disulfiram:

Disulfiram is a medication that treats chronic alcoholism. It is most effective in people who have already gone through detoxification or are in the initial stage of abstinence.

This drug is offered in a tablet form and is taken once a day. Disulfiram should never be taken while intoxicated and it should not be taken for at least 12 hours after drinking alcohol. Unpleasant side effects (nausea, headache, vomiting, chest pains, difficulty breathing) can occur as soon as ten minutes after drinking even a small amount of alcohol and can last for an hour or more.

Acamprosate: Acamprosate is a medication for people in recovery who have already stopped drinking alcohol and want to avoid drinking. It works to prevent people from drinking alcohol, but it does not prevent withdrawal symptoms after people drink alcohol. It has not been shown to work in people who continue drinking alcohol, consume illicit drugs, and/or engage in prescription drug misuse and abuse. The use of acamprosate typically begins on the fifth day of abstinence, reaching full effectiveness in five to eight days. It is offered in tablet form and taken three times a day, preferably at the same time every day. The medication's side effects may include diarrhea, upset stomach, appetite loss, anxiety, dizziness, and difficulty sleeping.

Access Medication for the Treatment of Alcohol Use Disorder: A Brief Guide – 2015 to learn more about M.A.T. for alcohol use disorder. SAMHSA/ Medical Assisted Treatment