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What is Medication Assisted Treatment? <u>MAT</u>

"Medication-assisted treatment (MAT) 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. Medications used in MAT are approved by the Food and Drug Administration (FDA) and MAT programs are clinically driven and tailored to meet each patient's needs."

-(SAMHSA, 2021)

"Research shows that a combination of medication and therapy can successfully treat these disorders, and for some people struggling with addiction, MAT can help sustain recovery. MAT is also used to prevent or reduce opioid overdose."

-(SAMHSA, 2021)

Approved Medications:

Buprenorphine

- Used to treat opioid use disorder, <u>OUD</u>.
- ▶ Semi-synthetic opioid: produced from poppy plant compounds and combined with non-natural compounds (Addiction Resource, 2021).
- Partial agonist: Binds to opioid receptors in the brain and "tricks" the brain into thinking it is receiving opioid stimulation without creating euphoric effects (Florida DCF, 2018).
- Effects: blocking cravings, stabilizing brain functions, and minimizing discomfort from withdrawal (Florida DCF, 2018).
- Usually given as a sublingual tablet alone. If combined with other medications can be given as a sublingual film or buccal film (ASHP, 2019).
- High doses can be toxic and life-threatening to children and adults who have never used opioids previously (University of Utah, 2019).
- Side effects include: dizziness, constipation, headache, nausea/vomiting, drowsiness/fatigue, sleep disturbances, fever, tremors, sweating, and blurred vision (SAMHSA, 2021).

Approved Medications:

Methadone

- Used to treat OUD.
- Synthetic opiate: created in a lab, not derived from natural substances (Methadone Clinics, 2017).
- Agonist: Depressant that activates opioid receptors and triggers the release of endorphins to slow and block pain signals in the brain (Macalester College, 2021).
- ▶ Effects: "reduces opioid craving and withdrawal and blunts or blocks the effects of opioids (SAMHSA, 2021)".
- Available as a liquid, powder, or diskette. Can be crushed and taken with another liquid (SAMHSA, 2021).
- Overdose can occur if more than the prescribed dose is taken, or the medication is otherwise misused (SAMHSA, 2021)
- Side effects include: Sleep disturbances, nausea/vomiting, slowed breathing, skin irritation, sweating, constipation, and sexual dysfunction (SAMHSA, 2021).

Approved Medications:

▶ Naltrexone:

- ▶ Used to treat OUD and/or alcohol use disorder, <u>AUD</u>.
- Synthetic opiate: created in a lab, not derived from natural substances (SAMHSA, 2021).
- ▶ Antagonist: "Binds and blocks opioid receptors in the brain and reduces and suppresses opioid cravings. . . . Binds to endorphin receptors in the body and blocks the effects and feelings of alcohol (SAMHSA, 2021)".
- ► Effects: Suppresses less intense opioid and alcohol cravings, helps maintain sobriety (MA Dept of Mental Health, 2019).
- Available as daily pill or a monthly intramuscular injection (SAMHSA, 2021).
- Overdose can occur if taken in large amounts with a lowered tolerance (MA Dept of Mental Health, 2019).
- Side effects include: Nausea/vomiting, drowsiness, headache, dizziness, decreased appetite, joint pain, muscle cramps, sleep disturbances, and tooth pain (SAMHSA, 2021).

Synthetic Opioids

They're created in a lab & are almost identical in chemical structure to naturally-occurring opiates

- Demerol
- Methadone
- Buprenorphine
- Percocet

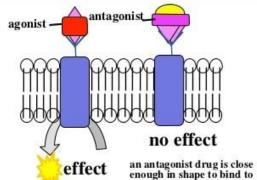


Semi – Synthetic

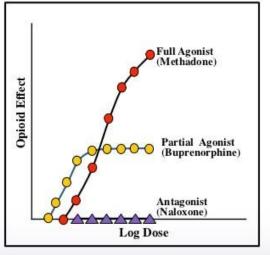
These ones contain both naturally-occurring opiates & chemically manufactured synthetic opioids

- Dilaudid
- Oxymorphone (Opana)
- Hydrocodone (Vicodin) ■
- Oxycodone (OxyContin)

Full and Partial Agonists vs Antagonists Treatment Strategies for Opioid Addiction



an agonist drug has an active site of similar shape to the endogenous ligand so binds to the receptor and produces the same effect an antagonist drug is close enough in shape to bind to the receptor but not close enough to produce an effect. It also takes up receptor space and so prevents the endogenous ligand from binding





FAQs:

Does MAT just substitute one addiction for another?

- "This is a common misconception about MAT. MAT relieves withdrawal symptoms and psychological cravings that cause chemical imbalances in the body and provides safe and controlled level of medication to overcome the use of an abused opioid."
- 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."

-(SMART Recovery, 2018)

► Can MAT be used by itself?

- ► "Under federal law <u>42.CFR 8.12</u>, MAT patients receiving treatment . . . must receive counseling, which may include different forms of behavioral therapy."
- ► "Behavioral health treatments are ways of helping people with mental illnesses or substance use disorders . . . change behaviors, thoughts, emotions, and how [they] see and understand situations."
- "Medications for mental and substance use disorders provide significant relief for many people and help manage symptoms to the point where people can use other strategies to pursue recovery."

FAQs

Who can treat an individual using MAT?

- "Methadone used in the treatment of [OUD] can be prescribed and dispensed only through a SAMHSA-certified [Opioid Treatment Program]."
- "Buprenorphine-containing drugs, such as Suboxone can be prescribed by physicians who obtain a waiver from the DEA after taking specified training in the use of these drugs."
- "Naltrexone, oral or injectable, can be prescribed by any licensed physician."

-(SMART Recovery, 2018)

► Where is MAT available?

Qualified providers operate out of hospitals, inpatient facilities, civil commitment facilities, corrections facilities, primary care offices, and community clinics.

-(BSAS, 2021)

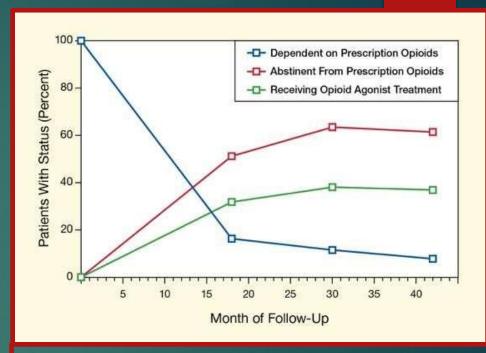


FAQs

▶ Does it work?

- "Abstinence Rate Exceeds 60 Percent in Long-Term Follow-Up of Medication-Assisted Therapy for Dependence on Opioid Pain Relievers. Dependence on pain relievers dropped below 20 percent at 18 months, and below 10 percent at 42 months, after patients were stabilized on, and then tapered off, Bp/Nx. At all three follow-up points, patients who were currently engaged in opioid agonist therapy had markedly higher odds of positive outcomes."

-(Sarlin, 2015)



Prescription Opioid Addiction Treatment Study of 653 participants on Buprenorphine/Naloxone.

-(Sarlin, 2015)

FAQs

▶ Who is helped by MAT?

- -People with OUD
- -People with AUD

What are the limitations?

- -The medications can be harmful or lethal if not used as prescribed
- -MAT requires health insurance or the ability to pay out-of-pocket for the medical visits and prescriptions
- -Medications can only be prescribed by qualified providers and not just PCPs
- -There is a stigma attached to both addiction and MAT that can make people with OUD/AUD less likely to seek or consent to MAT

-(SAMHSA, 2021)

-(MA Dept of Metal Health, 2019)

Is it worth it?

Benefits

- Stabilizes brain functions
- Long term treatment can reverse some of the damage caused by substance use
- Allows patients to maintain a healthy level of daily functioning
- Reduces cravings and withdrawal symptoms

▶ Risks

- Stopping MAT immediately can cause withdrawal
- Potential for abuse
- Medication side effects and interactions
- Risk of overdose or death if not taken as directed



-(MA Dept of Mental Health)

Who is involved?

Counselor

- Provides behavioral health services in a group and/or individual setting.
- Uses different techniques including, motivational interviewing, to help clients maintain sobriety.
- Provides referrals (as appropriate) to other agencies for various rehabilitative services.
- Assesses clients' goals and treatment plan and makes adjustments as necessary.
- Helps client identify supports and develop healthy coping skills.

Client/Patient

- Adheres to the MAT regimen.
- Meets regularly with a counselor for behavioral health services.
- Uses medications <u>as</u>
 <u>prescribed</u> and implements
 treatment plan and coping
 mechanisms.
- Obtains refills of prescriptions on time and reports any negative side effects to the provider.
- Pays for the necessary medications and medical appointments through insurance or out-of-pocket.

Provider/Prescriber

- May or may not already be patients' primary care provider.
- Assesses patients' needs and overall health to determine if MAT is appropriate.
- Prescribes the correct dosage of medication and establishes a schedule or regimen for when and how medications will be administered.
- Educates patients about their prescriptions including side effects, dangers, and the need to take medications as prescribed.

-(MA Dept of Mental Health, 2019)

Practical Applications of MAT

- As explained in previous slides, MAT's primary use is to reduce symptoms of withdrawal and curb cravings.
- Reduction of physical discomfort and cravings allows the client and clinician to focus more on the psychosocial/behavioral aspects of their addiction.
- Withdrawal symptoms frequently mimic illnesses such as the common cold or the flu. MAT diminishing these symptoms can help the client avoid needing to take time off work, or miss appointments with their clinician, due to feeling sick.
- MAT requires medications to be taken on a schedule. This can be integrated into a client's selfcare routine and help establish structure in activities of daily living.
- The need for prescription refills and medications dispensing can provide an incentive for clients to maintain regular contact with healthcare providers and follow-through with treatment plans.
- MAT can be used long-term in conjunction with behavioral health treatment to help the client maintain sobriety and physical and mental health.

Treatment Inequality

- "White individuals . . . are much more likely than others to receive buprenorphine".
- "Non-Hispanic black and Hispanic youth [are] less likely to receive treatment with buprenorphine or naltrexone than [are] non-Hispanic white youth."
- "Women with opioid use disorder are less likely to access treatment and other services compared with men."

-(National Institute on Drug Abuse)

These statistics have possible causes rooted in systemic inequity and ongoing problems in the medical field. According to the National Library of Medicine, "African Americans and people of Hispanic origin had persistently lower insurance coverage rates at all ages (Sohn, 2017)". NLM also published an article depicting how some MAT providers are less likely to prescribe buprenorphine to pregnant patients despite it being considered safe to do so (Patrick et al 2020).

The Stigma

On top of the stigma of addiction and mental health challenges, MAT also carries the stigma that comes with psychiatric medications.

"Individuals working in MAT experience discrimination and prejudice from other healthcare professionals, especially abstinent treatment professionals who disagree with the use of medications to treat [OUD]. This discrimination and prejudice stems at times from stigma toward addiction diagnoses, and at other times toward unique features of MAT itself. The experiences of addiction treatment professionals illustrate how medical interventions can mark patients and professionals in ways that affect patient care, and thus must be added to the scope of de-stigmatization efforts operating in the health sector." – (Madden 2019)

The prejudice and discrimination that people with OUD and/or AUD are experiencing reduces access to treatment and thus perpetuates the epidemic of addiction.

MAT Going forward

- "Due to the chronic nature of OUD, the need for continuing MAT should be re-evaluated periodically. There is no maximum recommended duration of maintenance treatment, and for some patients, treatment may continue indefinitely." –(FDA, 2019)
- Since MAT is a relatively new treatment, the information for long-term effects on clients is still somewhat limited. Research is ongoing however and so far, reputable studies "[have] not [found] any serious adverse effects on the people treated" (MD, G.B. 2017).
- ▶ It has been noted by researchers that "people on [buprenorphine] are not more likely to skip their medication than are people with betterstudied chronic diseases" (MD, G.B. 2017).
- ▶ Some physicians are trying to address the inequitable access to MAT, particularly buprenorphine, by pushing for it to be available at pharmacies without a prescription. A pharmacist would still track and monitor the medication use but it would be more accessible to those without insurance (Colarossi, 2019).

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