

Assessing the Evidence: Medication Assisted Treatment for Opioid Addiction¹

Two different medications, methadone and buprenorphine, are used to reduce cravings for opioids (e.g., heroin, prescription pain relievers, etc.) and allow patients the opportunity to lead normal lives. Medication assisted treatment was originally developed because detoxification followed by abstinence-oriented treatment had been shown to be ineffective in preventing relapse to opiate use. Methadone has been used in this capacity since 1964; buprenorphine was approved for opioid treatment in 2000. Methadone is dispensed in specialty treatment facilities and buprenorphine can be prescribed by specially trained physicians.

The primary finding is that there is clear evidence of a *high level of effectiveness* of both methadone and buprenorphine for treating opioid addiction.

Medication assisted treatment for opioids results in:

- Abstinence from or reduced use of illicit opiates
- Reduction in other illicit drug use
- Decreased criminal activity
- Decreased risk behavior linked to HIV and hepatitis C

Dosage and Treatment Limits

The literature indicates that many individuals treated at methadone clinics receive doses too low for effective treatment. Optimal methadone dosage is 60-109mg; buprenorphine is 16-32mg. Lower doses of buprenorphine (<16mg) are no more effective than a placebo.

Some clinics place arbitrary limits on duration of treatment; research doesn't support treatment limits for either methadone or buprenorphine treatment; the duration of treatment is indefinite.

¹ *Assessing the Evidence Base Series* is funded by the Substance Abuse and Mental Health Services Administration (SAMHSA). The goal of the AEB Series is to provide a framework for decision makers to build a modern addictions and mental health service system for the people who use these services and the people who provide them. The framework is intended to support decisions about the services that are likely to be most effective.

MAT and Pregnancy

Medication assisted treatment is particularly important to pregnant women who are addicted to opiates. It is associated with

- Decreased illicit opioid use
- Increased retention in treatment
- Decreased pregnancy complications
- Improved fetal outcomes

Use of methadone or buprenorphine puts newborns at risk for neonatal abstinence syndrome (NAS) requiring detoxification prior to release from the hospital. However, medical personnel develop birth and monitoring plans for women receiving MAT, leading to better neonatal outcomes than for women using illicit opioids during pregnancy.

Buprenorphine is as effective as methadone during pregnancy but may result in less severe NAS in newborns.

Risks

Methadone has been associated with adverse health-related consequences such as respiratory depression (difficulty breathing) and unusual heart rhythms. Most adverse consequences (including death) are attributable to the use of methadone for pain relief rather than for opioid treatment.

Additional Resources:

Thomas, C, et al. (2014). Medication-Assisted Treatment with Buprenorphine: Assessing the Evidence. *Psychiatric Services*, 65, 11-15.
<http://ps.psychiatryonline.org/Article.aspx?ArticleID=1778881>

Fullerton, C., et al. (2014) Medication-Assisted Treatment with Methadone: Assessing the Evidence. *Psychiatric Services*, 65, 146-157.
<http://ps.psychiatryonline.org/Article.aspx?ArticleID=1778879>