

National Alliance for Medication Assisted Recovery

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Making Methadone Safe

In the past half century health care has changed and today's patient needs to understand their medical care and treatment. A patient has the *responsibility* to know what is expected of them as a patient. If a patient does not understand something it is their task to let their health care provider know it. Discussing your health care including what is expected of you and your responsibilities should be part of your treatment. When you are being prescribed a narcotic it is especially important that you know how to take your medication and to store it safely because you are the one that will be held responsible if anything occurs.

Understanding Methadone

Methadone is a Schedule II narcotic and that means that it is tightly regulated when it is prescribed. There are differences in the way it can be prescribed depending on whether it is prescribed for opioid addiction or pain. These differences are significant and primarily based on prejudice and stigma towards opiate addiction that include the professionals that work in the field and the recipients (patients).

Before 2004 methadone for addiction could only be prescribed from a licensed clinic. In error many physicians translated this as methadone could only be prescribed from a licensed clinic and sent pain patients to opioid treatment programs (OTPs). Many clinics accepted these pain patients knowing that this was the only way they could obtain the medication they needed. The result was that pain patients were certified as opiate addicts when they were not and very often they were subject to

counseling regulations imposed by states. They were sick persons with serious chronic conditions that needed to be home.

Fortunately new regulations were passed in 2004 that allow for alternative ways to prescribe methadone for addiction treatment. This has helped to clarify methadone when prescribed for pain resulting in a five-fold increase in pain prescriptions. Methadone is an excellent medication for chronic pain and treats many kinds of pain that were previously difficult to control. The prescription for pain is very different than the prescription for opiate addiction. Methadone is usually not a good pain medication for persons with a history of opiate addiction and especially for persons already prescribed methadone for their opiate dependence. The prescription for pain is small doses of methadone usually every six (6) hours because the analgesia (pain relief) only lasts about six hours. To treat opiate dependence methadone is prescribed in one large dose and patients do not experience any analgesic effects.

A Long Acting Narcotic

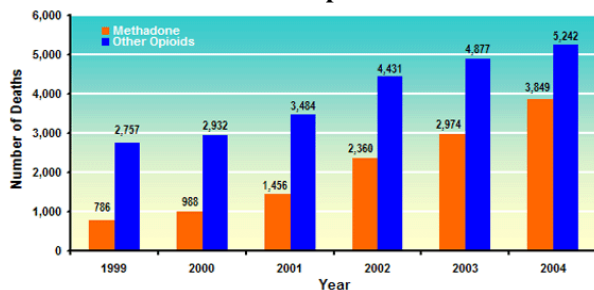
One of the reasons that methadone is so effective for opiate dependence is its long half-life. The half-life of a medication is how long it takes for half of it to be eliminated from the bloodstream. The half-life for methadone is 24-36 hours which is why methadone can be dangerous even for persons with a tolerance to opiates. One third of your dose from the previous day can still be in the bloodstream on day two. For example you are prescribed 30 mgs a day methadone

and on day one take it. On day two you take another 30 mgs however there is still 10 mgs from the previous day in your bloodstream so that you actually have 40 mgs. On day three when you take another 30 mgs there is 14 mgs from the previous day's dose in your bloodstream making your dose about 45 mgs. Very quickly a patient can easily end up with much more medication than they were prescribed especially when they start taking methadone. Over time patients will begin become tolerant and begin to store the extra methadone resulting in a time release effect for about 24-36 hours.

Methadone Deaths Increase

Methadone related deaths have increased dramatically; from 1999 through 2004 there was a 390 percent increase. Other deaths attributed to opioids have also increased but only by 90 percent, however they constitute a much larger percentage of the total for opioid-related deaths. A SAMHSA report found that the majority of methadone-related deaths involve abuses that were prescribed for pain management. Methadone deaths attributed to Opiate Treatment Programs (OTPs) have not increased.

Methadone and Other Opioid Deaths 1999-2004



Source: CDC

The top ten states with the greatest increase in deaths are West Virginia, Ohio, Louisiana, Kentucky, New Hampshire, Florida, Oregon, Pennsylvania, Tennessee and Wisconsin. Both federal and state agencies have responded in order to reduce the deaths.

Orientation

Most OTPs require MAT patients to receive some sort of orientation that include instructions to keep your medication safe. However the orientation usually takes about an hour and can include a lot of information: what to expect from the program, clinic rules, responsibilities and safety. The point is that keeping your medication safe is only a small part of the orientation. The intent of this education series is

to include basic information for addiction and pain patients to keep them safe.

Pain patients get even less information about methadone and how to keep it safe. Most pharmacists do not advise pain patients on how to keep a narcotic in a safe place and especially out of the reach of children, teenagers or adults. The result has been that methadone and other powerful medications are often stored in the medicine cabinet like aspirin and left there once it is not needed anymore. With the increased use of pain medications like methadone and oxycontin many homes have a lethal substance that is accessible to anyone using the bathroom. Opiates are fairly stable; meaning that they will maintain their potency for many years if they sit in the medicine cabinet they can still be powerful years after the expiration date.

Before Taking Methadone

Listen to the staff at the clinic, your doctor and pharmacist when you go the first time and ask questions if you don't understand something. Methadone is very powerful because it is long acting and even if you have taken other narcotic medications you can have side effects. Follow the dose instructions carefully and if you experience any side effects contact your doctor. Expect to experience some sedation but if you feel over sedated contact your doctor immediately.

Remember, methadone is a powerful narcotic and can habit-forming. Methadone should only be used by the person that it is prescribed for.

Before Taking Methadone Tell Your Doctor If You Have

- Heart disease and especially Long QT Syndrome or torsades de pointes.
- A family member with heart disease.
- Asthma, COPD, sleep apnea and other respiratory or breathing disorders.
- Liver or kidney disease.
- A history of a head injury or brain tumor.
- Epilepsy or a seizure disorder.
- An enlarged prostate or urination problems.
- Been diagnosed with a mental illness.
- A history of drug or alcohol addiction.

Never give methadone to another person and keep it in a secure place where others cannot get to it. If you have ever had an allergic reaction to a narcotic medicine you probably should not take methadone and should talk with your doctor about it. If you are asthmatic do not take methadone if you are having

an asthma attack. If you have been diagnosed with bowel obstruction (i.e. paralytic ileus) tell your doctor.

The Start of Treatment: Induction

Building a patient up to an effective dose for methadone is called Induction. For both pain patients and addiction patients this is the most dangerous time and can result in an overdose. Sometimes during the first week or two methadone does not seem to last 24 hours because it takes time before a patient will begin to store it. And it is during this period when accidental deaths occur. This is the reason why patients in addiction treatment come daily so the medical staff can observe you and intervene if you are overmedicated or under-medicated. Unfortunately pain patients do not have come to their doctor daily during Induction and the result has been numerous unnecessary deaths.

For both pain patients and addiction patients it is very important during the first weeks of treatment that you be aware of how you feel.

Typical Overdose Symptoms

The typical symptoms of overdose are: sedation, difficulty breathing, loss of appetite, vomiting, confusion, snoring, feels faint, dizziness and heart speeds up or slows. Some patients may experience some of these symptoms during the Induction period until they become tolerant. So it can be difficult to tell if the symptoms are normal or you are in danger. The best thing to do is to err on the side of caution and contact the doctor.

Taking Other Drugs Whether Prescribed or Not

Patients can be prescribed other medications that interact with methadone. It is not uncommon for addiction patients to take other drugs during Induction because they are not yet receiving an effective dose and begin to experience withdrawal. And Induction can take longer for patients that are prescribed other medications because of interactions between drugs. Taking non-prescribed medications can slow Induction and although it may be difficult it is better to avoid taking drugs. If you are experiencing serious withdrawal symptoms talk to the physician and they may decide to speed up Induction for you. Methadone is powerful narcotic and tolerance to it must be built slowly even though you are tolerant to opiates.

Other Special Conditions

Prolonged QTs, Torsades de Pointes or Heart Disease There are reports from laboratory studies and case reports suggesting that methadone can contribute to cardiac arrhythmia complications. There is evidence from opioid treatment and pain management that patients with a history of heart disease or a family history may be at risk for QTc prolongation and Torsade de Pointes (TdP). AATOD recommends that patients at risk should be monitored and recommends guidelines for these patients.

Sleep Apnea Sleep Apnea is a sleep disorder that is very dangerous. Basically a person with Sleep Apnea will stop breathing temporarily during sleep. Methadone is one opioid that has been tied to sleep apnea, but other opioids can have similar effects. With other sedatives such as tranquilizers the risk is greater. Most of this research is recent and more studies need to be undertaken to understand the causes and who may be at risk. If you have been diagnosed with Sleep Apnea tell your doctor.

Liver or Kidney Disease Methadone metabolism has little impact on Kidney Disease except in end state of renal failure it may be necessary to adjust the dose. The long half life of methadone can cause increases for patients with chronic liver disease. However, mean plasma concentrations do not significantly differ from patients with mild or moderate liver disease, and dose adjustments are not typically required.

Elderly Methadone does not seem to have any affect on the elderly. However, there may be other medical conditions and medications with the potential to interact with methadone.

Your Responsibility as a Patient

Both MAT and pain patients have the responsibility to keep their medication safe and especially away from children or teenagers. You will be responsible for any incident that may occur. Never give a narcotic or medication that is prescribed for you to anyone else. Giving a narcotic and any medication that causes a death can result in criminal charges. And if you give someone a drug without taking money that is considered a sale by the law. Every year or two a patient will give a child methadone to quiet them. They believe it will not hurt the child but very often the result is death (Black, 2009; Omaha News Staff, 2009; Orr, 2009; Sentementes, 2008).

Simple Guidelines to Reduce Risks

- Share your complete health history with your doctor. Other medicines may interact with methadone.
- Take methadone exactly as it is prescribed.
- Never take more than the amount prescribed.
- Do not take extra if you miss a dose.
- Don't consume alcohol.
- Be careful driving or operating machinery until you become tolerant to the sedative affects,
- Call 911 if you take too much methadone.
- Keep methadone in a safe place.
- If there are children keep methadone locked up.
- Take side effects seriously.

Disposing of Methadone

Take unused methadone out of their original containers and throw the packaging in the trash. Flush the drug down the toilet.

References

American Association for the Treatment of Opiate Dependence. QTc Interval Screening - AATOD Policy and Guidance Statement (March 30, 2009). Available from AATOD, 225 Varick Street, New York, NY 10014.

Black, L. DEA officials visit Waukegan clinic during probe of methadone death. Chicago Tribune (August 7, 2009).

Omaha News Staff. Father Believes Son Stole His Methadone Before Death. Omaha News (February 20, 2009).

Orr, P. Ada coroner says methadone likely killed Meridian baby. Idaho Statesman (January 10, 2009).

Sentementes, G. City police probe death of toddler who had methadone in body. Baltimore Sun (November 18, 2008)

Need More Information?

Patients who develop a problem with methadone or have questions should speak with a physician or contact 1-800-662-HELP.

Resources

Follow Directions: How to Use Methadone Safely [Outreach Campaign]. SAMHSA and FDA; 2009. See website: <http://www.dpt.samhsa.gov/methadonesafety/>

Methadone Safety Handout for Patients (in English and Spanish). By: Stewart B. Leavitt, MA, PhD; *Pain Treatment Topics*, Updated March 2008. See website: <http://pain-topics.org/pdf/MethadoneHandout.pdf>

Physician Clinical Support System – Methadone (PCSS-M). SAMHSA/CSAT and ASAM; 2009. Go to website: <http://www.pcssmethadone.org/>

"Zero Unintentional Deaths" — Methadone & Opioid Safety Campaign. Lynn R. Webster, MD. Go to website: <http://www.zerodeaths.com>

FDA Advisories

Methadone Use Pain Control May Result in Death & Life-Threatening Changes in Breathing and Heart Beat (Nov. 2006) <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm124346.htm>

FDA Methadone Alert: Death, Narcotic Overdose, and Cardiac Arrhythmias [November 2006]. <http://www.fda.gov/downloads/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/UCM142839.pdf>

DEA Advisory - Methadone Hydrochloride Tablets USP 40 mg (Dispersible) (January 1, 2008). http://www.deadiversion.usdoj.gov/pubs/pressrel/methadone_advisory.htm

Government Reports

A National Assessment of Methadone-Associated Mortality: Background Briefing Report (2004). <http://www.dpt.samhsa.gov/medications/methadone/mortality2003/methreports.aspx>

Methadone-Associated Mortality: Report of a National Assessment (2007). <http://www.dpt.samhsa.gov/medications/methadone/mortality2003/methreports.aspx>