Methadone Maintenance "101"

OTP/DAILY DOSING CLINICS

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Conflicts of Interest

- Employed by Acadia HealthCare

Why Methadone?

- At adequate doses methadone decreases opioid withdrawal symptoms and cravings. It also blocks the euphoria associated with opioid use.
- Enables patient to achieve a degree of stability, enhancing their ability to participate in psycho-social interventions.
- Long half-life (8 – 59 hours) allows for most patients to achieve therapeutic effect with once-a-day dosing.

A little history…

- Long history of opioid use disorder in the US, often iatrogenic.
- Major increase noted after the Civil War with thousands of veterans were left with significant dependence.
- Disease models of substance use disorders were already being elucidated in the 1800s – conflicting with the prevailing concept of these disorders as "moral failings", which still plagues us today.
- Many were treated, often in various "sanitoriums", generally receiving treatment with morphine or other pharmaceutical grade opiates. What we would now refer to as "opiate replacement therapy". (Eugene O'Neil's " A long Day's Journey Into Night")

A little more history…

- Harrison Anti-Narcotic Act (1914) and subsequent SCOTUS interpretations ("Webb vs the United States", 1919) changed the situation, essentially making opiate replacement therapies illegal.
- Methadone,first synthesized in Germany in 1939, was developed as a treatment for OUD in the 1960s by Dole and Nyswander.
- Federal regulations (42 CFR 8.12) and Wisconsin State law (WI DHS 75) now allow methadone use to treat opioid use disorders under strict regulation.
- We now have decades of research on MMT and indicating its effectiveness as a harm reduction modality which can result in greater life-expectancy, decreased incarceration rates, decreased rates of communicable diseases.

- Who is appropriate for referral to an OTP ? (broadest criteria)

- 18 years of age or older
- Meet the DSM –V criteria for Opioid Use Disorder
- Wisconsin resident with valid, state issued photo ID
- Able to medically tolerate treatment
- Patients who need the structure of a daily dosing environment

Further Criteria for Admission to Methadone Treatment:

- Opioid Dependence for greater than 1 year.
- Ability to abstain for long enough to present in clear opioid withdrawal on admission day.
- Some of these criteria can be waved in certain circumstances such as pregnancy, recent incarceration, demonstrated h/o previous treatment for opioid use disorder and others.
- Note that some methadone clinics now offer buprenorphine as an alternative treatment. Some are also beginning to offer injectable naltrexone.

Admission Day/Induction

- Urine drug screen
- Extensive psycho-social evaluation with counselor
- Review of medical and substance use history with nurse and physician
- Physical exam, documentation of current state of withdrawal
- Contact with other providers, treatment facilities to corroborate elements of history often required
- Discussion of risks and benefits of treatment, signed consent for treatment
- Initial starting dose of methadone given with period of observation after this
- Instruction in the use of naloxone for treatment of overdose.

Induction Dose and Titration

- Many factors can affect starting dose: current state of withdrawal, amount of opiate used daily and route, history of previous MMT, concurrent use of other medications, licit or illicit, especially benzodiazepines.
- Regulations dictate that first dose is not to exceed 30 mg of methadone daily. An additional 10 mg can be given if, after a period of observation, the physician evaluates the patient and deems it necessary. This is seldom practical in clinic situation.
- Average titrations, increasing dose 5 mg every 3 – 4 days are used in most situations. Titration protocols vary greatly from one facility to another. Because of wide variations in how methadone is metabolized, even low doses received daily can result in significant accumulation and toxicity in some individuals. Close observation is required.

Balancing Act...

- Titrating dose rapidly enough to get client to a place where they are comfortable enough to abstain, but slowly enough to avoid sedation or other impairment.
- Titration to an effective dose often takes weeks to months, requiring frequent assessments by dosing nurses and physician to review client's current pattern of illicit use, urine drug screens, physical and emotional signs of withdrawal.
- National averages suggest that 80 – 120 mg of methadone daily are sufficient to stabilize most patients.

"Stable Dose?"

- There is a great deal debate over what constitutes a stable, therapeutic dose. Some states do not allow methadone doses over 120 mg daily though clinically many patients are seen to benefit from higher doses.
- Careful evaluation of the patient and their expectations is needed to determine the "best dose" for each patient.
- Many clients will be looking for physical pain relief, anxiolytic effects, suppression of negative moods or even invasive thoughts from methadone. These patients often need to be urged to seek other, more appropriate care - medical or psychiatric.

"Magic Dose!"

- Some patients enter treatment expecting that medication alone will resolve all their problems and that once they reach some "magic dose" they will be comfortable in every sense.
- This can lead to some difficult discussions with a patient claiming significant withdrawal symptoms but showing no real signs of withdrawal. (Managing expectations on admission helps greatly.)
- A "post-dose evaluation" can be helpful in this situation. Evaluating the client 3 – 4 hours after dosing is a good way to determine if patient is having any sedation at their present dose.
- An evaluation of peak and trough methadone levels can help to determine if patient may be a "rapid metabolizer" who might benefit from a "split dose" instead of an increased daily dose.

Split-dosing

- Some patients metabolize methadone rapidly and may benefit from b.i.d. dosing of methadone to even out their blood levels over the course of a day. This often becomes a consideration when increases in the daily dose begin to present issues with fatigue 3 – 4 hours post-dosing but the client continue to have significant w/d symptoms the following AM before dosing.
- A patient can be evaluated for being "rapid metabolizer" by testing peak and trough levels of methadone. A peak : trough ratio of 2:1 or greater implies patient might benefit from a split dose.
- The question then becomes: What is the risk of diversion or misuse of the medication in this client?
- Pregnant patients can become an issue.

Take-Home Privileges

- Patients who succeed in abstaining from illicit use, behave appropriately in the clinic, attend scheduled appointments, are not involved in illegal activity, have a "stable" home environment and the ability to safely store take-home doses may qualify for this privilege.
- In this state, patients are started off with one Sunday take-home dose. Once they have had 90 days in clinic, meeting the requirements above they may gradually begin allowed to have more take home doses as they progress in their recovery.
- After a year in treatment they may be at the point where they only need to visit the clinic once a week. After another year this can be extended to 2 weeks between visits. This is the maximum in this state. Other states allow up to 4 weeks for stable patients.

"Guest Dosing"

- It is possible to have a maintenance client dose at another clinic for a limited period of time. Most often this comes up with vacations, temporary work assignments, etc.
- A patient who has been in treatment for > 90 days, in good standing, at a stable dose can ask to have arrangements made for dosing at most clinics in the USA.
- Complications can arise, especially with out-of-state guest dosing, because of variations in state regulations. States can vary on number of take-home doses permitted, limits on maximum dose of methadone, what days/times clinics are open.
- Wisconsin requires approval of the state methadone authority for anyone requesting to dose at a Wisconsin clinic from out-of-state.

"Exceptions"

- When guest dosing is impractical, a client can ask their clinic to apply for an exception from state and federal regulations restricting the number of take-home doses a patient can have.
- Exceptions may require approval from both federal and state authorities before any "exception" doses can be given to the patient.
- Clinic physician is required to attest that the patient is in good standing and that the therapeutic benefit out-weighs the risk associated with giving extra doses to this patient.

Interruptions in treatment

- Any patient who has been absent from the clinic, missing 3 or more dosing days, needs to be re-evaluated as a "re-start".
- The reasons behind the patient's absence need to be reviewed. Some are easily explained such as incarceration or a hospitalization. Other possibilities include desire to avoid detection of illicit use or lack of interest in continued treatment.
- Missing dosing days can result in loss of privileges such as take-home doses.
- Judging what dose to re-start a client at is often difficult. The patient needs to be evaluated for signs of impairment or withdrawal and have a urine drug screen done along with discussion of what substances may have been recently used.

Monitoring

- Patients continue to submit urine drug screens throughout their treatment, a minimum of 3X/month.
- Patients with take-home privileges are subject to "call-backs". This means that they must be available to return to the clinic within 24 hours to have a urine drug test and to allow a "bottle count" to demonstrate that they are continuing to abstain and are not diverting their medication.
- Positive drug screens, "failed" call-backs, missed appointments, legal problems, psychiatric or medical issues requiring closer surveillance can result in decreased take-home privileges.
- More severe problems can result in behavioral contracts, treatment team interventions and, at times, administrative discharge from the program.

Continued illicit use…

- Any continued illicit use is strongly discouraged and will prevent patient from progressing from daily dosing to the take-home program.
- Beyond this, the reaction to positive drug screens is seen in a harm reduction context. For example, further reaction to cannabis use may depend on how the client is progressing in other aspects of his recovery such as maintaining family connections, employment and other pro-social activities.
- Other illicit use, such as benzodiazepines, alcohol, cocaine may present a grave threat to the patient. These threats are met with behavioral contracts and often referral to an increased level of treatment such as an IOP. Administrative discharge may be considered in cases of severe threat after discussion of the risks and benefits of such an action.

Problematic prescriptions

- Patients may present with prescriptions such as benzodiazepines, opiates or other sedating meds that can create a problem with drug interactions. (Periodic review of the PDMP is crucial.)
- Other medications can increase the risk of cardiac or pulmonary side effects from methadone.
- In cases such as these we obtain a release from the patient to discuss these concerns with the prescribing physician. If the physician is aware of the possible risks involved and wishes to continue the medication we may need to increase monitoring and consider adjustment of the methadone dose.
- Treatment of acute pain with short term opiates is often appropriate but may result in the temporary loss of take home privileges to allow for closer surveillance until that treatment is completed.

Length of Treatment?

- After 6- 12 months of abstinence, long term goals are reviewed. Some clients want to begin tapering ASAP, others who may have been in treatment on multiple occasions in the past may plan to remain on methadone for the rest of their life.
- All patients are offered tapering. This is can be presented with the goal of stopping the medication completely or simply decreasing to the lowest effective dose, reducing the risk of dose related side effects.
- Any taper should be very gradual to minimize withdrawal symptoms and the risk of relapse. Orders are written so the client can halt the taper at any time.

Tapering off methadone - to what?

- The chronic, relapsing nature of OUD should be discussed with each client as they prepare to end methadone treatment.
- Options such as transitioning to suboxone or injectable naltrexone should be discussed.
- A period of continued participation in counseling at the clinic after stopping methadone is encouraged as the first few months after treatment are a high risk time for the client. Involvement in mutual support groups such as Celebrate Recovery, Narcotics Anonymous, Smart Recovery can also be helpful.
- It is important to encourage an understanding that this is a lifelong disorder and that a period of abstinence is not to be confused with a "cure". Patients must know they can admit cravings or a relapse and seek help when they need it.

"The opposite of addiction is not sobriety; the opposite of addiction is social connection"

- JOHANN HARI, TED TALK (2015)

Discussion questions:

- Why does a proven treatment such as methadone maintenance continue to have such a negative image in the community?
- How can OTPs become better integrated into the medical/treatment community?
- What are the barriers to greater acceptance of a harm reduction philosophy of treatment in the community?