COMMUNITY HEALTH CHOICE

OPIOID USE DISORDERS

Opiate Use Disorder- Overview:

For Practice Guidelines see the following:

- ASAM Guidelines for Treatment: https://www.asam.org/docs/default-source/practice-support/guidelines-and-consensus-docs/asam-national-practice-guideline-supplement.pdf
- Canadian Medical Association (2015): https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5837873/
- SAMSHA Guide for Treating Pregnant Women: https://store.samhsa.gov/product/Clinical-Guidance-for-Treating-Pregnant-and-Parenting-Women-With-Opioid-Use-Disorder-and-Their-Infants/SMA18-5054

Over 2.5 million Americans suffer from opioid use disorder which contributed to over 28,000 overdose deaths in 2014.

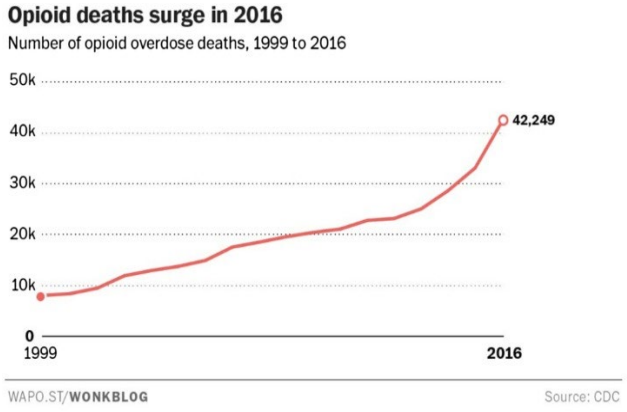
The opioid drugs refer to the group of chemical compounds structurally and functionally related to the substance found in the opium poppy plant. Some opioids are made directly from the plant, while others must be synthesized in a lab (and are referred to as opiates). Heroin is a potent opioid which is so strong and dangerous that it is considered a Schedule I drug by the FDA, to denote that it has NO acknowledged, legitimate or safe medical use under any circumstances. There are a number of opiate medications which are as effective as heroin, however heroin's potency is unmatched and warrants it more dangerous, given the narrow therapeutic window and low doses needed to cause respiratory collapse.

Opioid medications have been utilized in medicine probably for as long as their analgesic effects have been appreciated. Via interaction with opiate receptors located in many areas of the brain, spinal cord, and organs, these chemical messengers block painful or nociceptive signals, while also causing significant releases of dopamine at a wide variety of CNS sites.

Since 1999, the rate of death from opioid misuse has risen over 600%.

Approximately 130 people die from opioid overdose each day.

>70,000 people in the US died in 2018 as a result of opioids.



Symptoms of Opiate Intoxication/Overdose:

- drowsiness, slurred speech, unsteady gait
- confusion, possibly severe
- nausea
- constipation
- euphoria
- slowed breathing or decreased respiratory effort
- pinpoint pupils
- profound sedation, emesis, risk of suffocation/choking
- hypoxia, cardiac arrest, coma, death

Responding to an Overdose: The most serious problem resulting from opioid overdose is respiratory depression, and this is the cause of death in most cases. In case of an overdose, follow these steps:
If the victim is not responsive, follow the ABC's:

Ask for Assistance- Always! - Call 911 if you're alone, but if not ask others around you to help. Most individuals freeze in the midst of an emergency situation. BUT: These individuals **WILL HELP** if given only minimal direction by the individual who has taken charge. Have them call for 911, look for a naloxone kit or an AED (if on mall/school grounds).

Assess Airway

Administer Antagonist - If you have a naloxone kit, administer it according to the directions.
Note: naloxone is available without a prescription in some areas. Ask your local pharmacist.
Naloxone has minimal street value, is safe to carry, and is not abusable (it does not produce a high).
Consider carrying a life-saving naloxone "kit in case".

Breathing - Give rescue breaths, preferably through an airway, if available.

CPR: If victim has no pulse, start CPR. Compression rate is 100/min with a rescue breath every 30 compressions.

**Respiratory depression and most symptoms of overdose can be reversed via blockade of opioid receptors in the CNS by an agent with greater affinity for those receptors than the opioid drug has. Naloxone is an immediate acting, highly competitive opioid receptor antagonist with higher affinity for the opioid receptors which affect breathing.

Individuals at Greatest Risk of Overdose: Risk of Overdose is higher in certain individuals. Overdose risk (for any opiate, but especially IV and insufflated heroin) is higher in those new to opioid use, in elderly individuals, especially those on a number of other medications, and in **individuals who have recently stopped using opioids.** During the detoxification period, the opiate addicted individual experiences an abrupt drop in tolerance to the sedative and depressant effects of the drug. This loss of tolerance results in heightened sensitivity to oversedation, respiratory depression, and overdose death, which may occur at a dose similar to or lower than that which would not have caused overdose prior to the detoxification period. The combination of opioids and benzodiazepines

Opiate Withdrawal:

- Drug cravings
- Anxiety/irritability
- Insomnia
- Abdominal pain

- Vomiting
- Diarrhea
- Tremors (shaking)
- Feeling cold

Opioid withdrawal symptoms generally last between three and five days, although they can last up to 10 days. Opioid withdrawal is very uncomfortable. Though rarely life threatening, the symptoms of withdrawal are such that many find it impossible or scary to stop without significant medical assistance. While inpatient hospitalization is rarely needed, a medically supervised detoxification center with access to medications to manage withdrawal, is advisable in many cases.

Treatment for Opioid Use Disorder:

There are many options that have been successful in treating drug addiction including:

- Rehabilitation services can be delivered in inpatient, partial hospital, residential, or outpatient settings.
- Choice of setting or level of care should be individualized based on risks, needs, and medical necessity.
- Behavioral counseling - individual or group
- Medication Assisted Treatment (see below)
- Medical devices
- Digital applications used to monitor withdrawal symptoms or deliver skills training
- Evaluation and treatment for co-occurring mental health issues such as depression and anxiety
- Long-term follow-up to prevent relapse

For help in finding treatment options for substance or opioid abuse this SAMSHA tool may be helpful: https://store.samhsa.gov/system/files/pep18-treatment-loc.pdf

Medication Assisted Treatments for Opioid Use Disorder:

There are three drugs approved by the FDA for the treatment of opioid dependence: **buprenorphine, methadone, and naltrexone.** All three of these treatments have been demonstrated to be safe and effective in combination with counseling and psychosocial support. Everyone who seeks treatment for an OUD should be offered access to all three options as this allows providers to work with patients to select the treatment best suited to an individual. Less than 1/2 of privately-funded substance use disorder treatment programs offer MAT and only 1/3 of patients with opioid dependence at these programs actually receive it. 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.
Research shows that, for some people, the integration of both behavioral and pharmacologic (medical) types of treatment is the most effective approach for overcoming opioid addiction.
The belief that medications used in medication-assisted treatment substitute one drug for another is a misconception. Medication assisted treatment has been increasingly shown to be pivotal in saving the lives of addicted patients, and a variety of safe medication delivery options are entering the field with more expected. For additional and up to date information on medication assisted treatment see the following resources:

The National Institute of Drug Abuse (NIDA) provides a helpful fact sheet summarizing effective treatment options for opioid addiction:

Providers' Clinical Support System for MAT (2017). PCSS-MAT is a national training and clinical mentoring project developed in response to the opioid use disorder crisis. The overarching goal of PCSS-MAT is to provide the most effective evidenced-based clinical practices in the prevention, identification, and treatment of opioid use disorders.

Opioid Abuse and Pregnancy:

Neonatal abstinence syndrome (NAS) occurs when an infant becomes dependent on opioids or other drugs used by the mother during pregnancy. **NAS increased nearly fivefold nationally between 2000 to 2012**, coinciding with rising rates of opioid prescribing to pregnant women.

**Buprenorphine and methadone have both been shown to be safe and effective treatments for opioid use disorder during pregnancy. While NAS may still occur in babies whose mothers received these medications, it is less severe than in the absence of treatment. Research does not support reducing medication dose to prevent NAS, as it may lead to increased illicit drug use, resulting in greater risk to the fetus.

Treatment with methadone or buprenorphine improves infant outcomes by:

Stabilizing fetal levels of opioids, reducing repeated prenatal withdrawal
Linking mothers to treatment for infectious diseases & reducing the likelihood of transmittal to the unborn baby
Providing an opportunity for better prenatal care
Improving long-term health outcomes for the mother and baby

For more on Opioid Use in Pregnancy:
https://www.drugabuse.gov/publications/treating-opioid-use-disorder-during-pregnancy/treating-opioid-use-disorder-during-pregnancy

Texas HHS Pregnancy and Postpartum Intervention Resources

For historical context on the opioid crisis the following summary represents the view of one physician who trained in the late 1990's:

"The Evolution of an Epidemic: Client-Consumers, Novel Vital Signs, and Oversight Excess: How cultural changes in medicine and leadership contributed to the Opioid Crisis"
Kimberly Erway, M.D '01, Board-Certified in Psychiatry, '07.

The ability of opioids to dampen severe pain and to reduce individuals' emotional and stress responses to pain made these medications valuable for post-surgical pain, serious injuries, and end of life comfort since their discovery, long before the scientific or the modern medicine era. Traditionally, opioids were reserved for moderately- severe or severe pain, and occasionally for the control of cough or diarrhea. While opioids were known to be effective for pain control, the concomitant dopaminergic euphoria they induce remains their major Achilles heel, as it the main contributor to opioids' addictive potential. Addiction risk was widely recognized by physicians, as the opium crisis of early 1900's Asia had highlighted the phenomenon of widespread opiate abuse and addiction and had raised awareness worldwide.

Prior to 1995, many physicians believed that use of these medications in the acute setting, for a short duration of time was reasonable, though there was a conservatism surrounding pain prescribing which was often decried in the media. This phenomenon was often referred to as "opiophobia" and pressure to provide a more complete pain control was notable as early as the 1980's. While pain may be considered a subjective, experiential phenomenon, it is not without malicious potential beyond sensory discomfort. In addition to the distressing experience that is pain, it is increasingly recognized that these experiences are highly variable, causing far more distress in some than in others. Regardless of these variabilities, for those whose experience is of uncontrolled pain, the problematic ramifications can be considerable. Consider a post-surgical patient, for example: Distraught

by severe pain, the patient may be less willing to ambulate, use incentive spirometry, exercise, or eat, all of which may complicate the post-op progress. The management of pain in a preemptive fashion likely grew in part out of scenarios like that one.

Other influences unique to the past two decades are worth considering in conceptualizing the opioid crisis. In the late1990's medicine was emerging period of capitation. As costs continued to rise, the business side of medicine continued to gain influence. While trust in physicians had diminished, medicine was increasingly consumer driven. In this competitive playing field, emphasis shifted toward patient-centered, self-directed health care in which customer, consumer, or client satisfaction was a primary concern. Physicians were frequently admonished in the media for having been too conservative in their use of pain medications and insensitive to those in pain. Numerous print and video reports at the time (in media and even across a number of journals) discussed pain control as a relatively straightforward and achievable goal for most patients, and the withholding this comfort measure was increasingly considered unjustified.

Addiction risk was minimized. While addiction was considered a serious health concern for those already addicted to or abusing illicit drugs, the risk of addiction in those *legitimately experiencing pain* was repeatedly regarded by teaching attendings, residents, and seemingly everyone else around the watercooler as a misunderstood, inappropriately emphasized, and grossly exaggerated concern. Worrying about addiction was controversial as concerns might lead the practitioner to withhold pain relief from suffering patients. Though the existence of legitimate evidence was often implied as support for the emerging and widespread "enlightened understanding" of pain medications and pain patients at the time, to date, no association has been found between the legitimacy or severity of pain and the risk of addiction. At about this same time, a new formulation of oxycodone was introduced to the market (Oxycontin) and was specifically marketed as a medication for was marketed for non-cancer related chronic pain. As most physicians who were in practice or in training at the time will recall, the "minimal risk" message for pain patient was repeated across the country and internationally, for a number of years. (Note:This widespread belief was based upon two small retrospective publications from the 1980s: the first, published as a one paragraph letter to the editor without detailing any scientific rigor, described low (0.03%) addiction rates for inpatients receiving opioids for acute pain; the second, a retrospective review of the 38 patients, demonstrated that only 2 of 38 patients with chronic pain developed misuse or abuse issues when receiving opioids).
Porter J, Jick H. Addiction rare in patients treated with narcotics. N Engl J Med. 1980;302(2):123.[PubMed] [Google Scholar]
Portenoy RK, Foley KM. Chronic use of opioid analgesics in non-malignant pain: report of 38 cases. Pain. 1986;25(2):171–186. doi: 10.1016/0304-3959(86)90091-6. [PubMed] [CrossRef] [Google Scholar]

Encouraged by government regulatory agencies, the importance of pain assessment and treatment was further prioritized, and the experience of pain was re-categorized. **No longer a subjective patient report or a "symptom," pain was reimagined as a clinical *sign* - or an objectively observable, quantifiable indicator of a physiologic state.** Over the objections of a number of cautious clinicians, pain was effectively rebranded as the *"fifth vital sign."* In 1999, the Veterans Health Administration launched the "Pain as the 5th Vital Sign" initiative, requiring the assessment of pain intensity ratings (0 to 10) for all patients at all clinical encounters. Ubiquitous posters depicted animated characters wearing progressively distressed expressions corresponding to various levels of pain. The results of mandated screening assessments were predictable. As was expected or occasionally explicitly required, reports of pain resulted in the initiation of treatment for that pain.