Opiate Use Disorder

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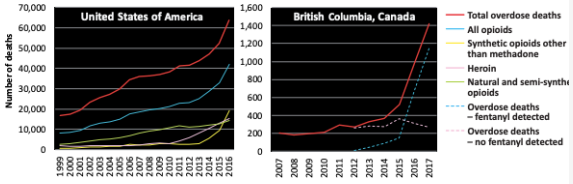
Worldwide problem

- Approximately 450,000 deaths in the world due to drug use in 2015
  - 76% of deaths due to Opiate use disorder (OUD)
- People who inject drugs (PWID)
  - 10.6 million worldwide in 2016
  - Have the greatest health risks
    - > 50% live with Hepatitis C
    - 1 in 8 live with HIV
- In 2016 only 1 in 6 people with substance use disorders (SUD) got treatment.
  - Only 79 countries have harm reduction strategies or MAT
  - Only 34 countries have HIV testing for PWID

Worldwide problem

- Prisoners are at higher risks for infectious diseases but lack access to care
- Afghan opium poppy cultivation drives record opiate production
  - 65% increase in production between 2016-2017
  - More than 75% of world opium cultivation is in Afghanistan
- Dark web closures – effect was minimal

FIG. 8 Overdose deaths from selected drugs in the United States and British Columbia, Canada



Source: For United States, see Holly Hedegaard, Margaret Warner and Arialdi M. Miniño, "Drug overdose deaths in the United States, 1999–2016", NCHS Data Brief, No. 294 (December 2017). For British Columbia, Canada, see British Colombia Coroners' Service, "Illicit drug overdose deaths in B.C., January 1, 2008–February 28, 2018" (Burnaby, British Columbia, Office of the Chief Coroner, 5 April 2018); and British Colombia Coroners' Service, "Fentanyl-detected illicit drug overdose deaths. January 1, 2012–December 31, 2017" (Burnaby, British Columbia, Office of the Chief Coroner, 31 January 2018).

Pharmaceutical Opioids

- The misuse of pharmaceutical opioids (Tramadol) is increasing
  - West and North Africa
  - Near and Middle East
- Increasing misuse of opioids in Western and Central Europe (Rx pain medication)
  - Overdose deaths also from fentanyl and its analogues

Australia

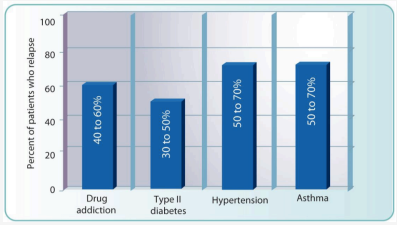
- 14 million prescriptions for opiates written every year
- 69% of drug-related deaths in 2015 were due to a prescription drug
- Naloxone Pilot Program – offers Naloxone spray (Nyxoid) for free to certain individuals in NSW, SA, WA through Feb 2021
- Shift from heroin to prescription opiates
  - Codeine has been changed from over the counter to Schedule 4 (prescription only)
  - PDMPs implemented to monitor prescriptions for opiates
  - Introduction of abuse deterrent formulations
- Strategies:
  - Harm reduction with Naloxone (take home naloxone or THN to reduce overdose deaths – nasal spray available OTC
  - Opiate substitution therapy (MAT in US)
    - Only 10% of practitioners trained to prescribe

In the United States

- Almost half of Americans have a family member or close friend who's been addicted to drugs
- For the first time in 50 years, life expectancy in the USA has declined for 2 consecutive years.
  - A key factor was unintentional injuries, which include overdose deaths
- Over 20 million Americans over age 12 had a substance use disorder in 2016
  - Opiates – 2 million
  - Alcohol – 15 million

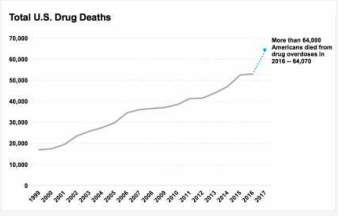
National Survey on Drug Use and Health, 2016

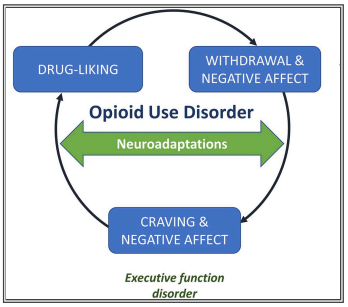
SUD – A CHRONIC RELAPSING DISORDER



McLellan, Lewis, O'Brien & Kleber (2000) JAMA, 284: 1689-1695.

65,000 overdose deaths in 2016 / 72,000 deaths in 2017 (Vietnam casualties = 58,220)

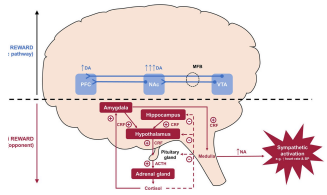




Cycle of Addiction

1. Pleasurable, drug liking, euphoria in early stages of addiction
2. Withdrawal and negative affect (stress and dysphoria associated with withdrawal from the drug)
3. Craving (intrusive preoccupation with the drug) and ongoing negative affect.

Reward and Anti-Reward



- Addiction occurs when there is a deviation from the homeostatic set-point created by the reward and anti-reward systems in the brain
- In OUD, the importance of the anti-reward system during the withdrawal state is supported by the evidence that cortisol levels are suppressed in patients with active opioid use
- Heroin craving has been shown to be positively correlated with serum cortisol levels emphasizing the **need to target the anti-reward system in the long-term management of OUD.**
- Opioid agonist therapies (OAT), such as buprenorphine and methadone, have been shown to normalize the HPA axis

Kakko, et al. 2019

Billy's Story

The problem

About 29% of patients given opiates for chronic pain abuse them

8-12% develop an addiction

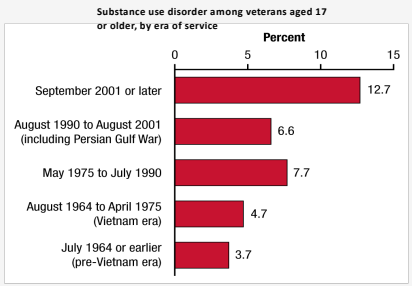
4-6% who misuse opiates transition to heroin

Approximately 80% of people who use heroin first misused prescription pain meds

Opiates

- Prescription pain relievers
  - Hydrocodone (Vicodin) – dental work / injuries
  - Oxycodone (Oxycontin, Percocet) – for moderate – severe pain
  - Oxymorphone (Opana) – for moderate – severe pain
  - Morphine (Kadian / Avinza) – surgery pain
  - Codeine – for mild pain / cough / diarrhea
- Heroin
- Synthetic opioids such as Fentanyl – **50-100 times more potent than morphine**

Opiate Addiction in the Military



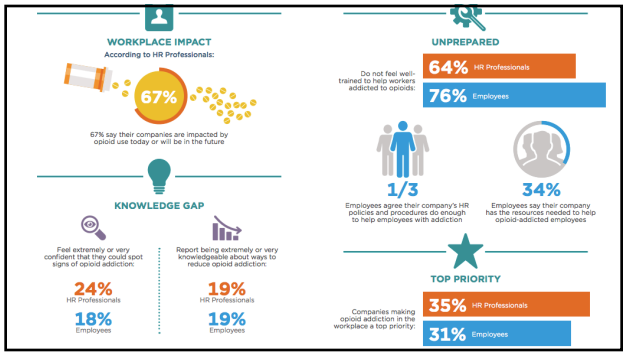
Opiate addiction in the military

Risk for SUD in military:

- Multiple deployments
- Combat exposure
- Mental health disorder, esp. PTSD

Challenges to getting treatment:

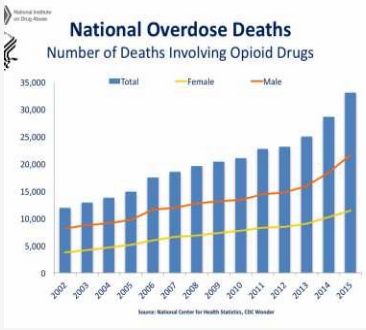
- Zero-tolerance policies enforced by random drug testing
- Stigma
- Lack of confidentiality



The problem

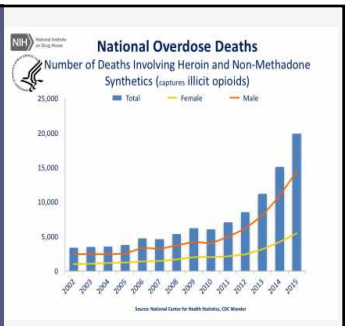
Every day more than 90 Americans die of opioid overdose

- Rudd et al., 2016
- Alcohol deaths = 6 deaths / day



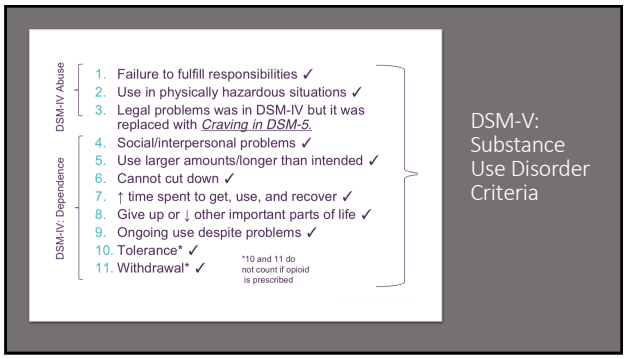
Deaths from illicit opioids

- **The highest rise is from deaths associated with heroin**
- **6.2 fold increase (2002-2015)**



- 22.7 million Americans (8.6 percent) needed treatment
- 2.5 million people (0.9 percent) received treatment

Treatment gap



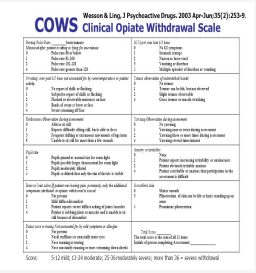
- Addiction is characterized by inability to consistently abstain, impairment in behavioral control, craving, diminished recognition of significant problems with one's behaviors and interpersonal relationships, and a dysfunctional emotional response.
- Like other **chronic diseases, addiction often involves cycles of relapse and remission**. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death.
- Addiction is a primary, chronic disease of **brain reward, motivation, memory, (decision making) and related circuitry**. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by **substance use and other behaviors**.

Causes

Alcohol and Drug addiction - 50-60% hereditability

Case – Sara and Ben

- Patient is 28 y.o. white female who lives in a small mountain town in Colorado with her boyfriend of 5 years. Both have been using heroin for 3 years.
- Both are underweight, Sara has had no period for over 2 years
- They have tried to get off heroin but one or the other relapses
- Very resistant to maintenance therapy with suboxone
- Subsistence lifestyle



Wesson & Ling. J Psychoactive Drugs. 2003 Apr-Jun;35(2):253-9.

COWS Clinical Opiate Withdrawal Scale

Resting Pulse Rate: _____ beats/minute Measured after patient is sitting or lying for one minute 0 Pulse rate 80 or below 1 Pulse rate 81-100 2 Pulse rate 101-120 4 Pulse rate greater than 120	GI Upset: over last 1/2 hour 0 No GI symptoms 1 Stomach cramps 2 Nausea or loose stool 3 Vomiting or diarrhea 5 Multiple episodes of diarrhea or vomiting
Sweating: over past 1/2 hour not accounted for by room temperature or patient activity 0 No report of chills or flushing 1 Subjective report of chills or flushing 2 Flushed or observable moisture on face 3 Beads of sweat on brow or face 4 Sweat streaming off face	Tremor: observation of outstretched hands 0 No tremor 1 Tremor can be felt, but not observed 2 Slight tremor observable 4 Gross tremor or muscle twitching
Restlessness: Observation during assessment 0 Able to sit still 1 Reports difficulty sitting still, but is able to do so 3 Frequent shifting or extraneous movements of legs/arms 5 Unable to sit still for more than a few seconds	Yawning: Observation during assessment 0 No yawning 1 Yawning once or twice during assessment 2 Yawning three or more times during assessment 4 Yawning several times/minute
Pupil size 0 Pupils pinned or normal size for room light 1 Pupils possibly larger than normal for room light 2 Pupils moderately dilated 5 Pupils so dilated that only the rim of the iris is visible	Anxiety or irritability 0 None 1 Patient reports increasing irritability or anxiousness 2 Patient obviously irritable anxious 4 Patient so irritable or anxious that participation in the assessment is difficult
Bone or Joint aches: If patient was complaining previously, only the additional component attributed to opiate withdrawal is scored 0 Not present 1 Mild diffuse discomfort 2 Patient reports severe diffuse aching of joints/muscles 4 Patient is unable to sit still because of discomfort	Gooseflesh skin 0 Skin is smooth 3 Piloerection of skin can be felt or hair standing on end 5 Prominent piloerection
Runny nose or tearing: Not accounted for by cold symptoms or allergies 0 Not present 1 Nasal stuffiness or unusually moist eyes 2 Nose running or tearing 4 Nose continuously running or tears streaming down cheeks	Total Score: _____ The total score is the sum of all 11 items Initials of person completing Assessment: _____

Score: 5-12 mild; 13-24 moderate; 25-36 moderately severe; more than 36 = severe withdrawal

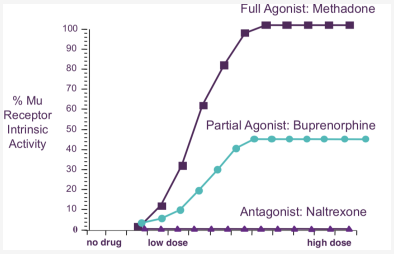
- Adjunctive medications for withdrawal
  - Clonidine 0.1 mg every 4-6 hours
  - Trazadone for sleep
- Induction protocol
  - COWS score > 12-13

Medication Assisted Treatment - Benefits

- Allow reestablishment of homeostasis of the reward pathways in the brain away from substances
- Restore emotional and decision-making capacities
- Control symptoms of opioid withdrawal
- Suppress opioid cravings
- Block the reinforcing effects of ongoing opioid use
- Promote and facilitate patient engagement in recovery-oriented activities
- Coupled with behavioral interventions
  - Enhance the salience of natural, healthy rewards
  - Reduce stress reactivity and negative emotional state
  - Improve self-regulation
  - Increase avoidance of relapse triggers

Volkow, et al, NEJM. 2016
ASAM National Practice Guideline, June 1, 2015.

Opioid (mu) Receptor Activity for Medications treating Opioid Use Disorder



Medication Efficacy for Opioid Use Disorder

	All cause Mortality	Treatment Retention	Any Opioid Use	HIV or HCV Transmission	Criminal Activity
Methadone	↓ (n=4)[a,c]	↑ (n=6)[a]	↓ (n=6)[a]	↓ (n=34)[b]	↓ (n=2)[a]
Buprenorphine	↓ (n=2)[a,c]	↑ (n=4)[a]	↓ (n=2)[a]	↓ (n=6)[b]	↓ (n=2)[a]
Oral Naltrexone	No data	↑ (n=3)[d]	↓ (n=3)[d]	No data	↓ (n=2)[d]
Extended Release Naltrexone	↓ (n=1)[e]	↑ (n=6)[e-j]	↓ (n=6)[e-j]	No data	↓ (n=1)[g]

(n = number of studies)

Methadone

- Oral preparation – liquid, tablet or oral solution
- Only dispensed at SAMHSA-certified opioid treatment programs (OTP) for daily administration onsite or if stable, at home.
- Opioid agonist
- Risk of overdose during induction or if taking benzodiazepines or alcohol
- Approved for detox and maintenance of opioid addiction
- Patient who may need more direct supervision, frequent relapses, may need psychosocial support, need more structure
- Contraindication: patients with respiratory depression or paralytic ileus
- Use with caution in elderly and debilitated, head injury or increased intracranial pressure, renal, liver disease, or at risk for QT prolongation

Methadone

- Duration of action = 24-36 hours
- Variable, long elimination half-life = 15-150 hours
- 80-120 mg is average dose
- Has been used in pregnancy for over 40 years.
  - Breastfeeding not contraindicated
  - Neonatal abstinence syndrome may occur
- Cons:
  - requires careful monitoring
  - Prolongs QTc in 23% of patients by 16 weeks of treatment
  - Multiple drug-drug interactions
  - Increased risk of mortality in first 2 weeks of treatment due to complex pharmacokinetics

Medication Assisted Treatment - Buprenorphine

- Requires prescriber to complete special training to obtain a DATA waiver – 35 / 100 / 245
- Buprenorphine is a long-acting partial opiate agonist
- It is not "substitution of one addiction for another"
- Induction on medication – must be in mild to moderate withdrawal (see COWS scale)
- Average dose is 8/2 – 16/4 mg per day = Sublingual
- Used for detox and maintenance
- Drug interactions: Atazanavir/ritonavir: increases buprenorphine concentrations; rifampin: decreases buprenorphine concentrations

Medication assisted treatment

- Inverse relationship between heroin overdose deaths and patients treated with buprenorphine
  - Schwartz et al AJPH 2013

Buprenorphine / Naloxone

Table 1: Available Doses of Buprenorphine/Naloxone Combination Products*

Suboxone SL Tablet	Suboxone SL Film	Zubzolv SL Tablet	Bunavail Buccal
2 mg / 0.5 mg	2 mg / 0.5 mg	1.4 mg / 0.36 mg	----------
4 mg / 1 mg	4 mg / 1 mg	----------	2.1 mg / 0.3 mg
8 mg / 2 mg	8 mg / 2 mg	5.7 mg / 1.4 mg	4.2 mg / 0.7 mg
12 mg / 3 mg	8 / 2 mg + TWO 2 mg / 0.5 mg films	----------	6.3 mg / 1 mg

Buprenorphine + Naloxone

- Naloxone is included to reduce diversion / misuse
- Contraindicated with concurrent liver impairment, use of alcohol or benzodiazepines
- Precaution: Precipitated withdrawal
- Inverse relationship between heroin overdose deaths and patients treated with buprenorphine
  - Schwartz et al AJPH 2013

Buprenorphine

- **Subutex** is a sublingual formulation of buprenorphine without Naloxone
- It is recommended for Opiate dependence and can be used for chronic pain
- Doses of 2 mg and 8 mg are available; 24 mg / day usually the highest effective dose
- Elimination half-life is 31-35 hours
- Dose adjustments needed for hepatic impairment
- **Butrans** –is a buprenorphine transdermal patch
- Used for chronic pain necessitating long-term opioid treatment
- For those on 30 – 80 mg morphine equivalents or higher, it is recommended to reduce dose to <30 mg to reduce the risk of opiate withdrawal or inadequate pain management
- Initiate with 5 mcg patch. Do not change dose for at least 72 hours

Injectable Naltrexone - Vivitrol

Consider for:

- Patients who have failed agonist treatment
- Patients confined to environments that do not allow for medication treatments
- Patients who do not have access to agonist treatment
- Patients with high risk of diversion
- Patients who are highly motivated and willing to taper off opioid agonists
- Patients who do not want to be treated with an agonist
- Patients with concomitant opioid and alcohol use disorder

- Requirements
  - 5-7 days abstinent from short acting opioids
  - 7-10 days abstinent from long acting opioids
- Opioid abstinence – 35.7% vs. 23% with placebo. High attrition in study
  - Krupitsky Lancet 2011
- Monitor for development of depression, suicidality

Medication	Pros	Cons
Buprenorphine	• Quick stabilization of withdrawal • May also treat concomitant pain	• Possible overdose risk with concomitant alcohol use
Methadone	• Quick stabilization of withdrawal • May be more effective to treat concomitant pain	• Possible overdose risk with concomitant alcohol use
XR-Naltrexone	• Will treat concomitant alcohol use disorder • No risk of withdrawal if patient is incarcerated	• More severe withdrawal • Delay in initiation of treatment

Other Considerations on MAT

- Behavioral interventions improve outcome
- Studies show implants are superior to sublingual preparations by about 10% but studies are too short
- One study on Sublocade – 41-43% abstinence vs. 5% for placebo
- Buprenorphine used for **detox vs. maintenance**
  - Maintenance: 75% abstinent at 1 year / 0% mortalitDetox: 0% abstinent at 1 year / 20% mortality
- Buprenorphine vs. Methadone **Retention**
  - High dose methadone (60-100 mg/day) – 73%
  - Low dose methadone – 20%
  - Buprenorphine – 58%
- Retrospective study in JAMA - *Only treatment with buprenorphine or methadone was associated with a reduced risk of overdose – 76% reduction in overdose at 3 mos. And 59% reduction at 12 months.*(study included in your folder)
  - *Wakeman, et al. JAMA. Feb 2020.*

Case - Sara and Ben

- About 4 months after being on Suboxone, Sara reports that she thinks she might be pregnant
- She wants to know whether she should continue taking her Suboxone

Special Populations – OUD in Pregnancy

- 1 in 3 women enrolled in Medicaid and 1 in 4 with private insurance of reproductive age filled a prescription each year for the previous 4 years for opiates
- **Opioid use during pregnancy has increased**
  - The number of women with OUD during labor and delivery more than quadrupled between 1999-2014
- Health outcomes of OUD in pregnancy
  - Maternal death
  - Poor fetal growth
  - Preterm birth
  - Stillbirth
  - Birth defects – neural tube defects, gastroschisis
  - Neonatal abstinence syndrome

Pregnant Women – SBIRT (Screening, Brief Intervention, Referral to Treatment)

- Screening for use of alcohol and other substance use among all pregnant women is recommended in all health-care settings (e.g., primary care, obstetrical care).
- Pregnant women reporting hazardous or harmful alcohol or other substance use should receive a brief intervention.
- Pregnant women found to be dependent on alcohol or other substances should be referred to **specialist services**, where such services exist.

Barriers to Care for Pregnant Women with Opiate Use Disorder

- Legal consequences that sanction pregnant women with OUD
- State laws vs. what medical provider organizations are recommending re: substance use disorder screening and treatment and reporting and involvement of child protective services can be confusing
- Shame associated with OUD during pregnancy and biases in the medical profession (shaming)

Sara's pregnancy

- Should she remain on Suboxone?
- Should she breastfeed?
- What are the chances her baby will go through withdrawals?
- Should she get off Suboxone after the baby is born?

Opiate use disorder in pregnancy – treatment

- Methadone and buprenorphine (NOT Naltrexone) are successful in the management of opioid dependency
  - Methadone may enhance patient retention (daily administration)
  - Buprenorphine may result in milder neonatal abstinence syndrome, less preterm delivery and higher birth weights
- Medication and therapy better than either alone
- If on methadone, do not try switching to buprenorphine during pregnancy due to risk of opiate withdrawal syndrome and risk to fetus
- NEVER stop medication assisted treatment during pregnancy as baby will also go through withdrawals in utero and may not survive

Opiate Use Disorder after Delivery

- Patients should be encouraged to breastfeed if possible
- Monitor and treat for depression / anxiety in the postpartum period as this can trigger relapse
- Encouraging mother-child attachment is extremely important in this population
  - Poor infant attachment plus family history of SUD → increases later risk for child to have SUD, other ACE-related conditions
- Breastfeeding women have lower stress hormones
  - Stress is a trigger for relapse
- Relapse is common during the post partum period so close monitoring, support, treatment are necessary.
    - World Health Organization

Neonatal Abstinence Syndrome (NAS)

- Neonatal abstinence syndrome is a group of physiologic and neurobehavioral signs of withdrawal that may occur in a newborn who has been exposed to opioids in utero. Opioid use - either from prescription misuse or from illicit use – has consequences for both mother and infant.
- Between 50-80% of exposed infants develop neonatal abstinence syndrome
- From 2009-2012, the number of infants with neonatal abstinence syndrome rose from 3.4 to 5.8 per 1000 hospital births (>20,000 infant in 2012)
  - Rates are higher in rural vs. urban areas

Neonatal Abstinence Syndrome

Neonatal Abstinence Syndrome Treatment

- Health-care facilities providing obstetric care should have a protocol in place for identifying, assessing, monitoring and intervening, using non-pharmacological and pharmacological methods, for neonates prenatally exposed to opioids.
- An **opioid** should be used as initial treatment for an infant with neonatal opioid withdrawal syndrome if required.
- If an infant has signs of a neonatal withdrawal syndrome due to withdrawal from sedatives or alcohol, or the substance the infant was exposed to is unknown, then **phenobarbital** may be a preferable initial treatment option.
- Infants should be **kept 4-7** days in hospital for observation and should be assessed for exposure to **other drugs of abuse**
    - World Health Orgnization

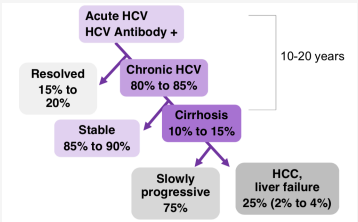
Neonatal Abstinence Syndrome

SYMPTOMS:
- Tremors (trembling)
- Irritability, including excessive or high-pitched crying
- Sleep problems
- Hyperactive reflexes
- Seizures
- Yawning, stuffy nose, or sneezing
- Poor feeding and sucking
- Vomiting
- Loose stools and dehydration
- Increased sweating

Medical Complications of Opiate Use Disorder

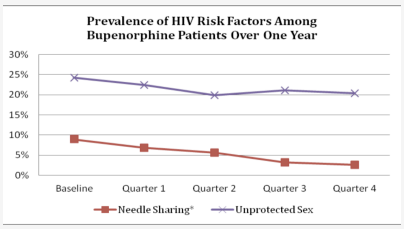
- Hepatitis C (HCV)
  - Affects 2.7 million in US
  - Affects 1/3 of IVDU age 18-30
  - Over 30% of IVDU over age 30
  - Baby boomers account for 75% of HCV
  - ¾ of infected people are unaware
  - HCV is the leading cause of cirrhosis, hepatocellular cancer and need for liver transplants
  - Most infected individuals have normal Liver function tests
- HCV Risk Factors
  - People who inject drugs
  - Intranasal drug use
  - Multiple sexual partners
  - HIV + / HBV +
  - Blood transfusion or organ transplant before 1992
- Groups at risk
  - Children born to HCV+ mothers
  - Healthcare workers
  - Patients on hemodialysis
  - Incarcerated persons
  - Persons who exchange sex for money or drugs

Natural History of Hepatitis C (HCV)



NIH Management of Hepatitis C Consensus Conference Statement. June 10-12, 2002. Available at: http://consensus.nih.gov/2002/2002HepatitisC2002116html.

Buprenorphine Helps Reduce Risky Behaviors



HIV / HCV

- People living with opioid use disorders are at increased risk for HCV and HIV due to needle sharing and sexual risk behaviors
  - Approximately 14,500 with injection drug use unaware of their HIV status
  - Testing is not routine in opioid treatment programs and decreasing: 2005 to 2011: 93% to 64%
  - When treated concurrently, results are better, stay in treatment longer
  - Buprenorphine use was associated with increased likelihood of initiating and remaining on HIV treatment
- Comprehensive prevention interventions for HCV and HIV include effective addiction treatment, behavioral risk reduction, and antiviral agents (pre-exposure prophylaxis for HIV, "PrEP")
- Treatment regimens for both HCV and HIV are highly effective in this population and can be safely used with opioid agonist therapy

Opiate Use Disorders – Psychiatric Comorbidities

- Among the 19.6 million adults with a past year substance use disorder, 41% (8.4 million adults) had co-occurring mental illness in 2015 (vs. 17.9 % of adults without SUD)
- Individuals with dual diagnoses:
  - Have worse prognosis
  - Have poorer quality of life
  - Have increased risk of suicide
- Treatment of psychiatric comorbidity improves the outcome of SUD

Why so common?

- Neurodevelopmental factors
- Shared risk factors
- Self-medicating theory

Treatment

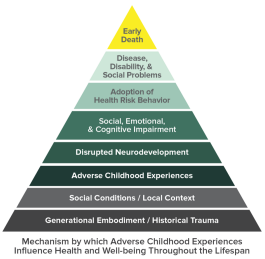
- Substance use disorders + depression
  - Antidepressants help with depression symptoms
  - Not clear if they foster improvement in drug or alcohol use
- Substance use disorders + Bipolar
  - Lithium or mood stabilizers have an impact on both
- Substance induced mood disorder vs. Independent mood disorder
  - Does Suboxone affect mood?

CAM therapies for OUD

- Acupuncture
  - Acupuncture could be effective in treating OUD. Moreover, EA could effectively alleviate symptoms of craving for opioid and depression, and TEAS could be beneficial in improving symptoms of insomnia and anxiety. Nevertheless, the conclusions were limited due to the low-quality and small number of included studies.
    - Chen et al., 2018
  - After 35 years of active research by both Asian and Western scientists, this review cannot be used to establish the efficacy of acupuncture in the treatment of opiate addiction because the majority of these studies were classified as having low quality.
    - Lin et al., 2012

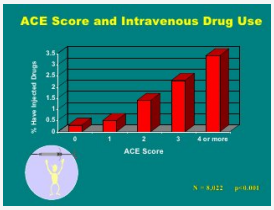
It's not about the drug

- Addiction has its' roots in childhood trauma
- *Trauma is defined as the **loss of some essential part of you,** like a sense of peace, vitality or presence. (or safety or trust)*
  - Gabor Mate'



Mechanism by which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan

ACEs and Substance use disorders



- ACEs account for 50-66% of serious problems associated with drug abuse
- With 5 or more ACEs, 7-10 times more likely to report illicit drug use, addiction and IVDU
- ACEs have graded relationship with drug initiation in early adolescence into adulthood
  - Drug use
  - Drug addiction
  - Intravenous drug use.

Intergenerational Trauma

https://youtu.be/ljdFLCc3RtM

5 LEVELS OF RECOVERY

THE Anchor™ PROCESS

SUPERFICIAL LEVEL OF BEHAVIORS: 1st
Eating Disorders, Substance Use, Depression, Anxiety, Sexual Compulsivity, others

EMOTIONAL SOUP: 2nd
Shame, Fear, Anger, Joy, Guilt – Emotions in control of the person. Emotions are the fuel for behaviors.

SENSATE LEVEL: 3rd
The body sensations associated with emotions

CORE BELIEFS: 4th
Beliefs formed in the midst of intense emotion, often forgotten but unconsciously these beliefs continue to shape and drive behaviors

DEEPER URGES OF THE SOUL: 5th
The authentic or true self which camouflaged by all of the above. Passion or Bliss. Your soul's desires

Treatments

- Inpatient or residential treatment
- Partial hospitalization treatment
- Intensive outpatient treatment
- Outpatient +/- Medication-assisted treatment

How lessons from the HIV Epidemic can help in the opioid crisis

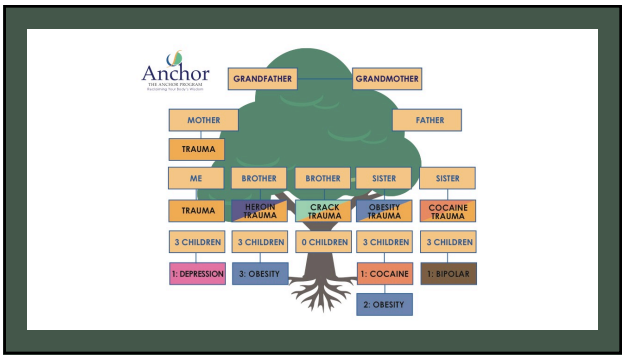
- Stigma hurts
- Activism helps
- The medications can only help when people have access to them

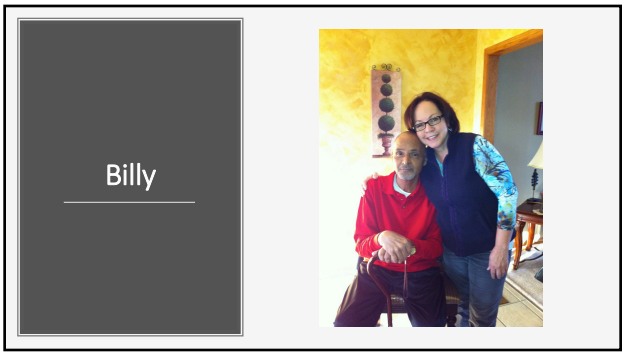
ssons from HIV/AIDS crisis can a Opinion

nd, For the Inquirer July 27, 2018

The Rest of Billy's Story

To heal the addict, you must treat the trauma

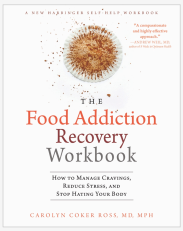




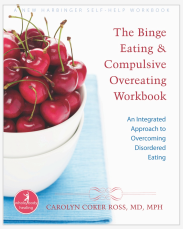
Points to Ponder

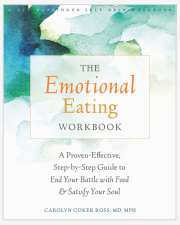
- How can we change the question from: What's wrong with you? To What happened to you?
- If addiction is a disease, why do we lock up people who relapse?
  - Does this make sense: the imprisonment of a patient with substance use disorder because of worsening condition and relapse
- Addicts do stupid things but not because of moral failing or intrinsic evil… drugs and alcohol severely affect good judgment
- Why are we punishing the victims?
  - Purdue Pharma – institutional antisocial behavior with severe national consequences that went unpunished

Integrative Approach



Integrative Medicine Approach





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