Learning Objectives

After attending this presentation, learners will be able to:

- Describe opioid use disorder
- Initiate treatment for opioid use disorders
- Describe the implications of opioid use disorders in people living with HIV infection

Question 1

According to CDC data, how many people died of opioid overdose in the United States in 2016?

1. 5,000
2. 10,000
3. 20,000
4. 30,000
5. Over 40,000
Addiction

- A state in which a person engages in compulsive behavior
  - The behavior is reinforcing (that is, pleasurable or rewarding)
  - There is a loss of control in limiting the intake of the substance
Why do people take drugs?

**To feel good**
- To have novel feelings
- Sensations
- Experiences
- And to share them

**To feel better**
- To lessen:
  - Anxiety
  - Worries
  - Fears
  - Depression
  - Hopelessness

Why do some people become addicted?

Biology/genes

Environment

Biology/Environment Interactions

Drugs Are Usurping Brain Circuits and Motivational Priorities
People who use drugs still acquire HIV

- Even in the 21st Century, we have outbreaks of HIV infection among people who use drugs (e.g., Indiana).
- But there is treatment for opioid use disorders
  - Metzger, 1993:
    - 2 cohorts of patients
    - 103 out-of-treatment IDU opiate users
    - 152 subjects receiving methadone treatment
    - HIV antibody conversion, 18-months
      - 22% of those out-of-treatment
      - 3.5% of those receiving METHADONE

What is medication assisted treatment?

- Opioid substitution treatment and medication assisted treatment are the same, but what is it?
- Buprenorphine and methadone can
  - reduce injection related HIV risk behavior
  - decrease psychosocial & medical morbidity
  - increase access to and retention with ARV
  - improve overall health status
  - are associated with decreased criminal activity
Dose effect on mu-opioid receptor availability

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Figure courtesy of Laura McNicholas, MD, PhD

Question 3

How many patients do you treat with buprenorphine for opioid use disorder?
1. I don’t have a waiver and so can’t treat anyone
2. I have a waiver but don’t do it yet
3. 0 to 10 patients
4. 11 to 20 patients
5. 21 to 30 patients
6. 31 to 100 patients
7. Over 100 patients

Figure: Functional state

Stabilization of patient in state of normal function by blockade treatment. A single daily oral dose of methadone prevents him from feeling symptoms of “dependency” (indicated by a “High”) seen if he misses a shot of heroin. Dotted line indicates course if treatment is omitted.

Medications to treat opioid use disorder

- **Methadone**
  - Only in OTP
  - Efficacious, best retention

- **Buprenorphine**
  - Office based
  - Efficacious, retention less than methadone

- **Naltrexone**
  - Office based
  - Efficacious
  - Retention less than methadone & buprenorphine

Best Practices in Treatment

- Provision of low threshold, rapid access, appropriately dosed methadone
- Culturally appropriate counseling for heroin addiction [can be simple (NA) to more complex (CBT)]
- Treatment of the medical issues associated with addiction (e.g., HIV, hepatitis B/C, and Tuberculosis)
Key themes for HIV and substance use

- People who use drugs and are infected with HIV have higher morbidity and mortality than the general population and others with HIV infection.
- Discrimination is still evident among treating people who use drugs for HIV, Hepatitis C and tuberculosis treatments in the US and globally.
- Adherence remains possible, even in the setting of ongoing substance use.

In the Past, Bias: PWID without ART

- In the past, people who inject drugs (PWID) were denied HIV therapy until they ceased drug use.
- While multifactorial, there was a bias against drug users and a failure to recognize addiction as a medical illness.
- PLWHA with other medical illness were not denied treatment. In some settings (e.g., HIV/HCV; HIV/TB), having another medical illness with HIV makes ART access a priority.

In the Present: The Evidence

- Work from Evan Woods in British Columbia showed that in a cohort of 1191 ART naïve patients followed from ART initiation, resistance was found in 25% of the cohort during the first 30 months (PI and NNRTI resistance).
- No difference in resistance between people who inject drugs and people who do not inject who were started on ART.
This can be done anywhere

- In India, directly observed therapy of DAAs with buprenorphine in the field
- In Tanzania, adherence support for HIV and TB medications with methadone
- In New Haven, HIV and HCV treatment integrated into the methadone clinic

Practical Next Steps

- Screen patients for substance use disorders using standardized questions:
  - How many times in the past year have you had 5 or more standard drinks in a day?
  - How many times in the past year have you used an illegal drug or a prescription medication for nonmedical reasons?

Additional Next Steps

- People who use drugs can take medications and should be eligible for HIV, HBV, HCV, and TB care
- Prescribe naloxone and consider becoming a buprenorphine provider
- Review guidelines on the treatment of chronic pain and re-evaluate how you prescribe opioids and review
Questions?

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