The State of Disaster

Fentanyl, micro-dosing, the incarcerated population and what it all means for MOUD

The Opioid Epidemic

- Record number of overdose deaths
- fentanyl rising in use
- The pubic and those who use opioids are frightened

What are opioids?

- Generally chemicals that attach to and stimulate the "opioid receptors"
- morphine, heroin, kratom, fentanyl....
- There are important differences

Types of opioids

- "Natural Opioids"
- Morphine, codeine, hydrocodone, hydromorphone
- urine test: OPI/MOP

- Semi-synthetic
- Made from Thebaine
- Oxycodone, buprenorphine (suboxone)
- Need to test for each

- Full synthetic
- Not chemically related to other opioids
- Fentanyl, Demerol
- Need to test for each

- Other Opioids
- Old and new
- Kratom, ultram
- Have variable effect on opioid receptors

What is a Substance Use Disorder?

- Continuing to do something that you know is detrimental to you...
- Who hasn't?
- See ourselves in....us.

Diabetes of the Brain

- Generally did someone with Type 2 diabetes substantially contribute to their own disease?
- Are they bad people?
- While those who struggle with SUD did it to themselves...not bad people, just a bad problem.

Chemical Dependence

- I prefer the framework of a normal person, dealing with normal problems in a dysfunctional way...not dealing with the problem...
- "You are emotionally dependent on chemicals to escape from you."

Treatment of Opioid Use Disorder

- Goals:
- 1) Relapse prevention (Risk Reduction)

What are we realistically trying to achieve Day 1?

- The Combine Trial: The largest medication trial to date for alcohol dependence
  - Measured drinking days per month, not drinking at all or not...
  - Go from using a chemical 30/30 days to 20/30 days in the first month?
    - Is that success?

Achievable Goals

MOUD
(Medication for Opioid Use Disorder)

- Nearly 20 years of experience in the US with Buprenorphine:
- High dose, long duration.
- Reduce withdrawal symptoms, reduce craving, block the person from having effect from opioid use, therefore reducing use and preventing overdose.

Case Study

- Young Male, my patient for years on Buprenorphine, very stable, consistent negative UDS, tapers off...18 months later in jail.
- What was I thinking?
- Patients want to get off....so what do you do?

Fentanyl

- Cheap, plentiful, 100 times more powerful...killing people.

Patients and their families are Scared

- "I am going to die" inmate at KCCC

- About 1 in 7 opioid overdose deaths are in those recently released. JAMA Psychiatry, 75(4) 405-407 4/2018

Why is fentanyl so tricky

- 100 times more powerful than morphine
- Long half life
- difficult to test for
- Seems to be mixed with everything, and you can't tell.

Fentanyl Testing is hard

- Fentanyl needs to be specifically tested for (9/30-10/4)
- There are no tests for the office, CLIA Waived (as far as I know)
- Testing for opioids is widely misunderstood...

Analogs

- Sufentanil is 5-10 times as potent as fentanyl...
- Carfentanil, remifentanil, Thiafentanil...
- When we say "fentanyl" what we mean is super potent synthetic opioids...I don't even know if you can test for these...

Fentanyl is Potent

- Case 2: Patient on Sublocade long term, (been given in jail twice?), began using "fentanyl", now needs additional buprenorphine due to withdrawal?
- We are not in Kansas anymore...

Fentanyl has a long half-life

- Naloxone can wear off and patient can go back into overdose (<2 hours verses 17 hours)
- It can take days for the fentanyl level to get low enough to begin buprenorphine induction the usual way, 100% on day 1

Micro-dosing Buprenorphine

- Buprenorphine partially stimulates the opioid receptor, so if you have too much opioids in the system when starting, you go into withdrawal.
- For those who are using methadone or fentanyl, or who have difficulty starting on buprenorphine due to the wait or side effects....this method is very effective.

The "Bernese" Method

- First published by a group of physicians in Bern, Switzerland, they describe an initial dose of 0.2 mg gradually increased over several days...
- The lowest dose to easily get here is 1/4 of a 2 mg tab, 0.5 mg a day to start and to double every 48 hours is a simple version to 16-24 mg a day (maybe more with heavy "fentanyl" use)

MOUD in Jails

- Untreated, once released those with OUD have a 1:12 chance of overdose death in the near future.
- 6 months of injectable treated populations have 0% rearrest rate verses 30% less than 6 months...

What we are trying at KCCC

- Identify
- Begin on naltrexone or buprenorphine, transitioning to vivitrol or Sublocade at release.
- Discharge planning (bus pass, phone, insurance, appointment)

Identification is Challenging

- Although 60% have a SUD, very few seek care. National Sheriff's Assoc. (NSA) reported over 63% of inmates struggle with chemical dependency and 50% of those (over 30%) with opioids.
- Is that because they don't know it is available or they are not ready?
- We would like to begin routine POC Urine screening...but what about fentanyl?

MOUD or MAT?

- "Buprenorphine is not recovery in a bottle" Dr. Graham Chelius

IOP at KCCC

- "Jail time is not recovery" Every re-arrested inmate
- Without a evidence based system in place to develop recovery skills, after release, relapse is expected.
- MAT (Medication Assisted Treatment) is the better definition.

Current Status

- Buprenorphine is on the formulary at all jails statewide.
- Vivitrol is available for free from the maker.
- Sublocade is at best $1400 ($1700 retail) and is being purchased by HSRHA for KCCC.
- crushed, powdered and sublingually administered buprenorphine can't be diverted.

Choosing between Vivitrol and Sublocade

- Recently same day at KCCC: One chose naltrexone (did not want to restart buprenorphine), the other chose Buprenorphine (after weeks off opioids was still having withdrawal symptoms)
- Buprenorphine outcome data slightly better than naltrexone...

Post-Release Overdose Deaths

- PR-MAT resulted in a 60% reduction in deaths in RI.
- 2018 study- you need to treat only 11 with PR-MAT to prevent one death.
- "The dead don't recover"
- Some PR-MAT meds are better than others at reducing deaths post-release. (Bup > Naltrexone)

- May 2019 Boston: Federal court of Appeals ruled that not offering treatment (bupren
- We have a constitutional right. (8th amendment- cruel and unusual) Due to risk of death.
- Decision quoted international studies with 75% and 85% reduction in post-release death

What if they decline?

- At a minimum, you have introduced the idea, and please send a prescription for naloxone nasal spray to their pharmacy. You are reinforcing the life threatening nature of OUD and you may actually save someones life.