

## The Opioid Epidemic: Prescriptions, Fentanyl and COVID-19 “The Perfect Storm”

2020 Behavioral Health Virtual Conference

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## Historical Perspective

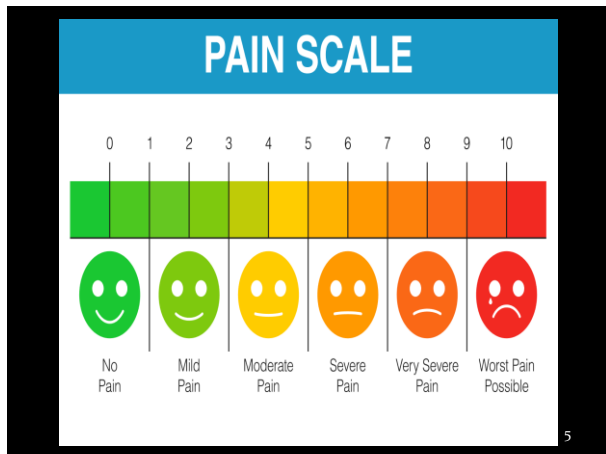
- Civil War: Introduction of the hypodermic needle and morphine analgesia.
- Harrison Act (1914): prohibition on prescription of narcotics (opioids) to addicts:
  - ✓ Many physicians prosecuted/fears of opioid prescribing
  - ✓ Increased drug trafficking and crime associated with opiate (heroin) and cocaine abuse
- 1974: 1<sup>st</sup> methadone maintenance program for opioid addiction.
- DATA 2000: office-based treatment of opioid dependence with buprenorphine.

## Prequel to Abuse of Prescription Opioids

- In 1971 President Richard Nixon officially declared “a war on drugs” and in 1973 he created the DEA to coordinate the efforts of all other agencies.
- In 1984 Nancy Reagan launched her “Just Say No” campaign
- 1989 President George H. W. Bush presented a national drug control strategy that included the largest budget increase in U.S. history. Unfortunately, even though there were large seizures of drugs and many individuals imprisoned, we have continued to see an increase in drug use.

## Abuse of Prescription Opioids

In 1995, Purdue Pharma developed OxyContin. After an **aggressive marketing campaign**, this drug became a significant option for **chronic pain management**. In this regard, physicians began prescribing this drug in excess quantities. In its original form, **OxyContin was crushable which allowed addicts to snort or inject very large quantities of oxycodone at one time. OxyContin became the most widely abused prescription drug in history.** This was the beginning of what we now know as a familiar term: **prescription drug abuse.**



## Abuse of Prescription Opioids

- Eventually, Purdue Pharma reformulated OxyContin to a non-crushable form, but it was too late.
- Pill mills were full throttle, hospitals and emergency departments were attempting to achieve an expected smiley face for their patients through evaluation of the 5<sup>th</sup> vital sign.

## Abuse of Prescription Opioids

- Then we saw the rise of oxycodone! When attention was brought to that drug as a problem.....
- Methadone use for pain management began to be prescribed!
- Eventually, oxycodone re-emerged as leader.

**Wow! What were we chasing?**

## Abuse of Prescription Opioids

- Since 1999: 300% increase in the sales of opioids in U.S.
- 2008: surge in deaths from overdoses (14,800); more than for heroin and cocaine combined.
- 2009: 475,000 emergency dept. visits for adverse events related to misuse of opioids (doubling in 5 years).
- CDC: Mixing of drugs was found in half of prescription opioid-related deaths.

## Abuse of Prescription Opioids

Due to the prescription drug abuse, states had been clamping down on pain clinics. Many states developed their own rules for pain and also prescription drug monitoring programs. Unfortunately, Florida was very late in that endeavor. **While neighboring states were clamping down, bus loads of people were coming to Florida pain clinics for those excessive quantities of opioids and benzodiazepines** (this busing of individuals from out of state to Florida was called the “Oxycontin Express”).

## Abuse of Prescription Opioids

- The Federal Centers for Disease Control labeled Florida the epicenter of prescription drug diversion because it had weak regulatory oversight of pain management practices, limited regulation of physician dispensing habits and, most importantly, no prescription drug monitoring program.
- Florida became known as the “Pill Mill” capital of the country.

## Abuse of Prescription Opioids

- According to DEA
- the state had over 900 unregulated pain management clinics in 2010.
- these clinics employed 90 of the top 100 oxycodone dispensing physicians in the country.
- Of the top 50 oxycodone dispensing clinics in the U.S., 49 were located in Florida and were selling more than 1 million oxycodone pills a month.

***Before new regulations were enacted by the Florida legislature, it was projected from state medical examiners reports that about 10 persons each day died of prescription drug overdose, primarily due to oxycodone abuse.***

## Abuse of Prescription Opioids

- Florida's prescription drug monitoring program, E-FORCSE (the Electronic-Florida Online Reporting of Controlled Substances Evaluation), eventually began operation in 2011.

*As of June 2016 only 23.7% of all licensed healthcare practitioners were registered to use it!*

## Abuse of Prescription Opioids

In addition, in 2011 Florida passed the following:  
Florida TITLE 64 DEPARTMENT OF HEALTH  
DIVISION 64B8 BOARD OF MEDICINE CHAPTER  
64B8-9 STANDARDS OF PRACTICE FOR MEDICAL  
DOCTORS; 64B8-9.013. Standards for the Use of  
Controlled Substances for the Treatment of Pain.

## Prescription Opioid Abuse Takes a Back Seat

- Unfortunately, the black-market business machine made its next move; heroin became much cheaper than prescription opioids.
- Past year heroin use increased from 373,000 (2007) to 669,000 (2012).
- Our local methadone clinics began seeing increasing numbers of individuals using heroin and not the all too familiar and popular prescription opioids.

## Prescription Opioid Abuse Takes a Back Seat

**2013 – 2014**  
***Fentanyl Emerged!***



ChingLabs.com

## HB 21 (7/1/2018)

- Education a late but great idea!
- Limiting prescriptions to 3 to 7 days for acute pain; possibly effective but not complete!.....What will happen when those addicted to pain pills can no longer get their prescriptions?
- This Bill was needed in the late 90's for the pill opioid epidemic.....we need more than this Bill due to the Fentanyl epidemic!!!
- STR and SOR only a beginning.....**I hope!**

## Neurophysiology

### The Action of Opioids

## Opioid Pharmacology

- Types of opioid receptors:
  - Mu
  - Kappa
  - Delta
- Addictive effects occur through activation of mu.
- Role of kappa and delta receptors in the addictive process are not well defined

## Function of a Full Mu Agonist

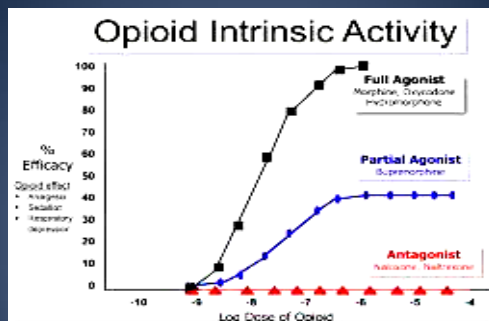
- Activates the mu receptor
- Highly reinforcing
- Most abused
- Includes heroin, methadone, oxycodone, others

## Function of a Partial Mu Agonist

- Activates the receptor at lower levels
- Is relatively less reinforcing
- Is less abused
- Buprenorphine

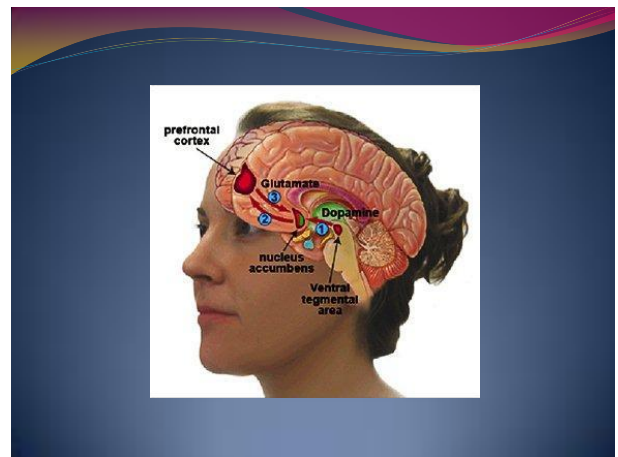
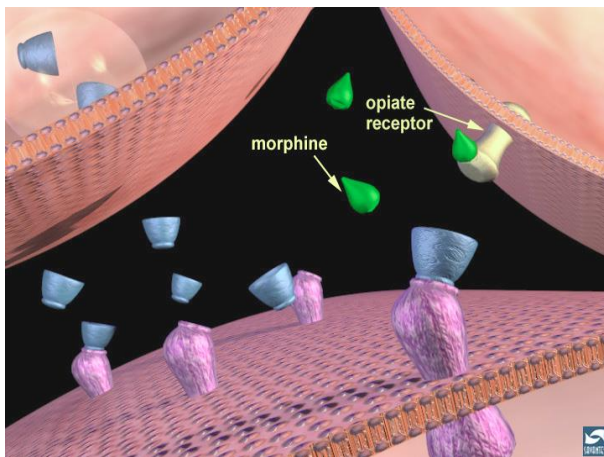
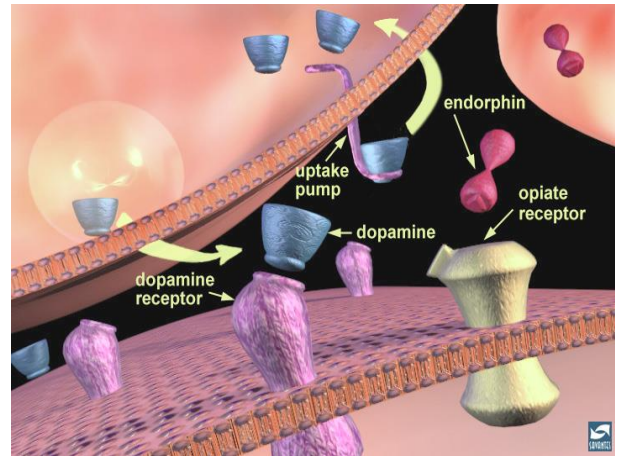
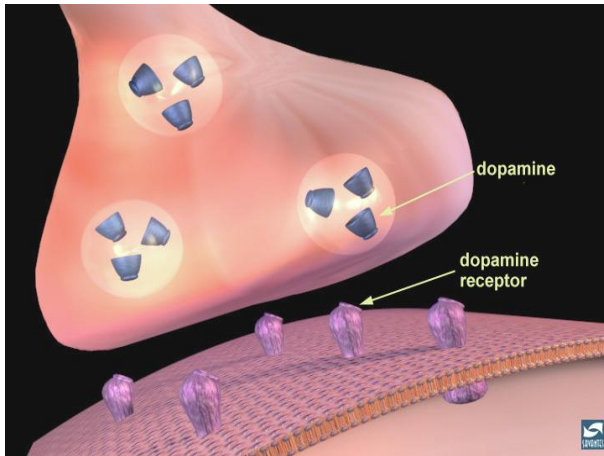
## Function of a Mu Antagonist

- Occupies without activating
- Is not reinforcing
- Blocks and will displace agonist opioid types
- Includes naloxone and naltrexone (Vivitrol)



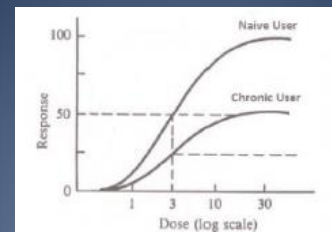
## The Centerpiece of Addiction

# Dopamine



# TOLERANCE

## Tolerance

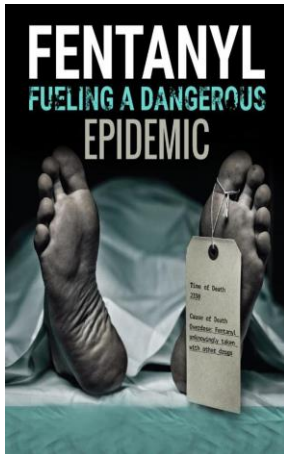


## Addiction Hijacks the BRAIN

*Fentanyl is 50-100x's more potent than Heroin*

***FENTANYL HIJACKS  
the MIND, BODY and  
SOUL!***





## Fentanyl and its analogues

33

### Nationwide

- Aside from fentanyl, there have been 9 other IMF'S identified aside from fentanyl (50- 100 times more potent than morphine) and carfentanyl (greater than 10,000 times more potent than morphine).
- **Is this the current generation's AIDS crisis?** In 2015 52,000 people died of drug overdoses; the peak year for AIDS related deaths was 51,000 in 1995. With our present crisis, **there is no end in sight!**
- According to STAT, there are now nearly 100 deaths a day from opioids with a worst-case scenario that the toll could spike 250 deaths a day due to Fentanyl and its IMF's.

### Nationwide

According to the American Medical Association:

- The epidemic will continue to grow through 2025!
- The US could see a record number of deaths, up to 200,000 individuals per year!

According to the CDC:

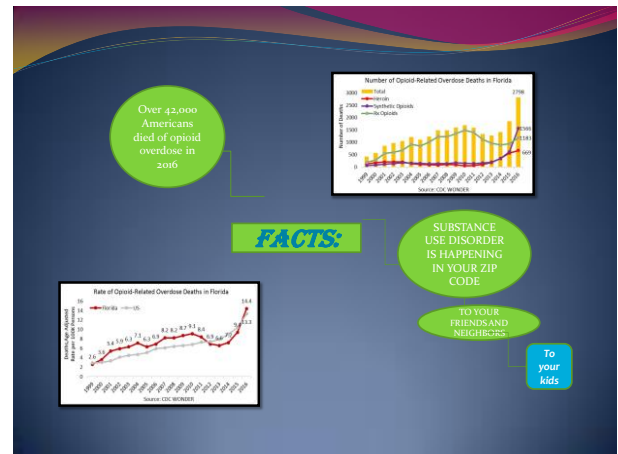
- 2016 there were 63,632 deaths
- 2017 there were 70,237 deaths

### LOCAL

- In 2015, Florida Heroin Deaths escalated to 779, a 74% increase from 2014; and a 240% increase from 2010. Fentanyl deaths increased over 69% (538 to 911) from 2014-15.
- In 2015, North Florida Heroin deaths rose to 45, a 181% increase from 2014; and a 1,000% increase from 2010. Fentanyl deaths increased nearly 70% (33 to 56) from 2014-15.
- Overdose victims – 2015 - JFRD responded to 2,114; 2016 - JFRD responded to 3,114
- 911 calls had tripled.
- In 2015 – cost of transporting OD victims was \$1,895,388.00; 2016 cost \$3,143,376.00 with current trend projections reaching \$4,451,124.00 in 2017. JFRD was transporting one OD every 2 hours.
- Naloxone use by Paramedics had increased fivefold with one-tenth of medical supply budget spent on naloxone.

## LOCAL

- In 2016 Duval County had 106 murders and 464 overdose deaths (up from 201 in 2015).
- Age distribution of drug related deaths in Duval County - 20-60 years old with 86.9% being Caucasian.
- The morgue is continually over capacity! 1900% increase in OD deaths due to heroin since 2011.
- Duval had the 2<sup>nd</sup> highest in the state for NAS cases in 2016
- A sampling of urines from a lab servicing the nation analyzing positive heroin samples in Florida from 2013 to 2016 found a 56.41% increase in associated fentanyl positivity (not testing for the other IMF's). Gateway detox: 100% of all heroin + urines are + for Fentanyl.



## LOCAL: The Neonatal Problem

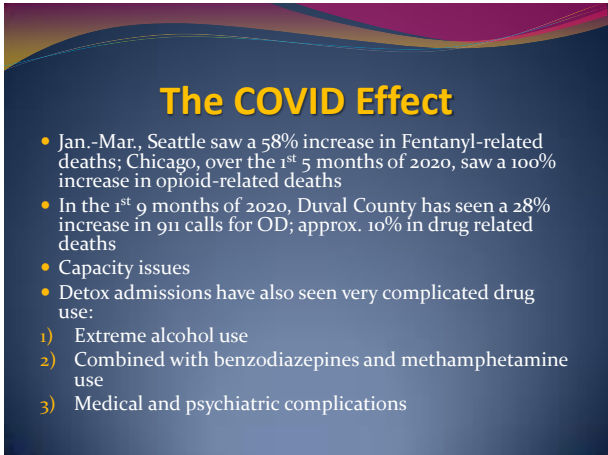
- In the last three years, the number of babies with neonatal addiction at UF Health is up from 10 per 1,000 to 15 or 16 per 1,000
- The average LOS is 16 to 17 days and can stay up to two months
- And their mothers often didn't expect or want babies: "90% of newborns battling the demon of addiction, passed via fallopian tubes, were products of 'unintended pregnancies'"

## How Common is Opioid Dependence?

Approximately 2.5 million Americans were dependent on prescription opioid prescription pain killers or heroin in 2012. **We don't know the real numbers now!**

- ED data not accurate
- Hospital data not accurate
- Morgue data not accurate

**It is worse than we know!**



# Pharmacologic Treatment Options

## Methadone

- For opioid dependence only.
- It is a highly regulated Schedule II opioid.
- DCF, DEA and Board of Pharmacy perform regular and stringent audits of Methadone clinics.
- Had been the gold standard for pregnant women due to potential fetal demise from withdrawal.
- Stops withdrawal sx's and craving.

## Methadone cont'd

Once stable, the majority of clients reveal the following:

- Reduced spread of disease
- Stable home life
- Reduced crime
- Stable finances/job
- Reduced relapse rate

Methadone works very well for prescription opioid dependence.

**Methadone is not working as well for treatment of the abuse of fentanyl or its analogues!**

## Suboxone/Subutex

- Schedule III medication for opioid dependence only.
- Buprenorphine is the active drug (Subutex) and attached to naloxone (Suboxone)
- Can only be prescribed by physicians with a "x" number. Certain training or course is required.
- For individual physicians, limits number of active clients.

## Suboxone/Subutex cont'd

- Clients don't get high once stable.
- Can be used in pregnancy.
- Clients also reveal the same as Methadone once stable:
  - Reduced spread of disease
  - Stable home life
  - Reduced crime
  - Stable finances/job
  - Reduced relapse rate

## Naloxone

- Opioid antagonist
- Reverses the effects of opioids for a few minutes
- Acts by competitive inhibition at the mu receptor
- Added to some medications as a deterrent to abuse
- Induces withdrawal symptoms

***This medication saves lives!***

## Naloxone



## The Safe and Healthy Neighborhoods Project

- SAMHSA funded, beginning Sept. 2019 through 2022 via JFRD
- Mission: Prevent and decrease opioid overdose deaths in Jacksonville by education about and distribution of Narcan kits
  1. Over 2,000 kits distributed
  2. 52% in high use areas
  3. Completed 47 trainings by Drug Free Duval; more than 842 individuals trained
  4. 16 reports of actual use

## Vivitrol

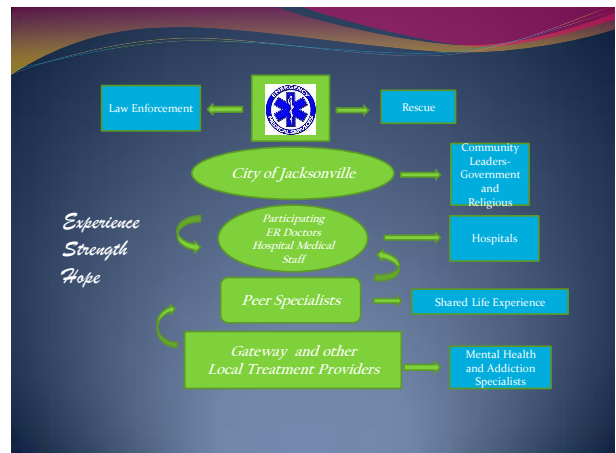
- For opioid and alcohol dependence.
- Injectable form of Naltrexone; a full mu receptor antagonist. It fully covers the receptor and does not allow opioids to attach.
- This is not an opioid. Not mood altering and not addictive.

## Vivitrol cont'd

- A monthly injection. The pill form can be taken every day but compliance is a problem and side effects are a greater possibility.
- Blocks action of opioids and reduces cravings for opioids.
- Reduces craving for alcohol and reduces effect.

## PROJECT SAVE LIVES

*The Evolution of an Idea  
The Shifting of a Paradigm*



## The Process

- OD (now all substances and MI) admissions to ED and stabilization
- Role of the Recovery Peer Specialists:
  - > Family
  - > Victim: *language of the heart*
  - > Warm hand-off!

## THE GOAL:

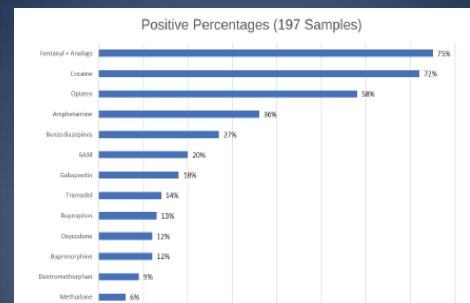
### Pre-Pilot

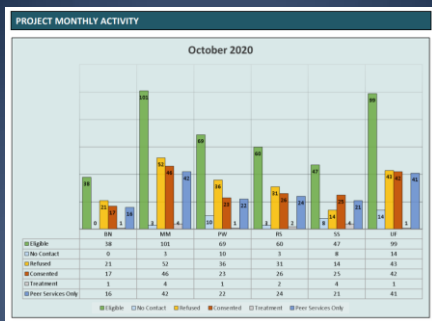
Reduction in Opioid-Related  
Overdoses, Recidivism and  
Death

### Pilot Completion

**THERE HAD BEEN NO  
DEATHS!!!!**  
**ONLY 2 HAVE HAD A  
REPEAT OD!!!!**  
**and**  
**Only 1/3 of the Budget!!!!**

## THE PARADIGM SHIFT THE DEMOGRAPHIC SHIFT





#### PROJECT STATUS

Project Save Lives began on November 16, 2017. Below is the activity for October 2020 and program totals.

DESCRIPTION	HOSPITAL						OCT 2020 TOTAL	PROGRAM TOTAL
	BN	MM	PW	RS	SS	UF		
<b>PATIENTS ELIGIBLE FOR SERVICES</b>	<b>38</b>	<b>101</b>	<b>69</b>	<b>60</b>	<b>47</b>	<b>99</b>	<b>414</b>	<b>3905</b>
NO PROGRAM CONTACT	0	3	10	3	8	14	38	346
REFUSED ALL SERVICES	21	52	36	31	14	43	197	1721
<b>CONSENTED TO SERVICES</b>	<b>17</b>	<b>46</b>	<b>23</b>	<b>26</b>	<b>25</b>	<b>42</b>	<b>179</b>	<b>1838</b>
DRUG-RELATED DEATHS	0	0	0	0	0	0	0	7
TRADITIONAL TREATMENT	1	4	1	2	4	1	13	401
PEER SERVICES ONLY	16	42	22	24	21	41	166	1430

BN = Baptist North, MM = Memorial Main, PW = ParkWest, RS = St. Vincent's Riverside, SS = St. Vincent's Southside, UF = UF Main

## Hot Off the Press

As of November 2020 HIDTA the emergence of:

**Purple Heroin** a combination of multiple substances which also includes.....

**Brorphine**

## ?QUESTIONS?