



Treatment of Opioid Related Disorder

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Objectives

1

Understand
different opioid
conditions

2

Understand the
treatment of the
above

3

Understand new
emerging trends in
treatment

Opioid Conditions

Overdose

Withdrawal

Opioid Use Disorder

Risk Factors for Overdose

- Individuals that use substances
- Individuals with mental illness
- Individuals that have overdosed before



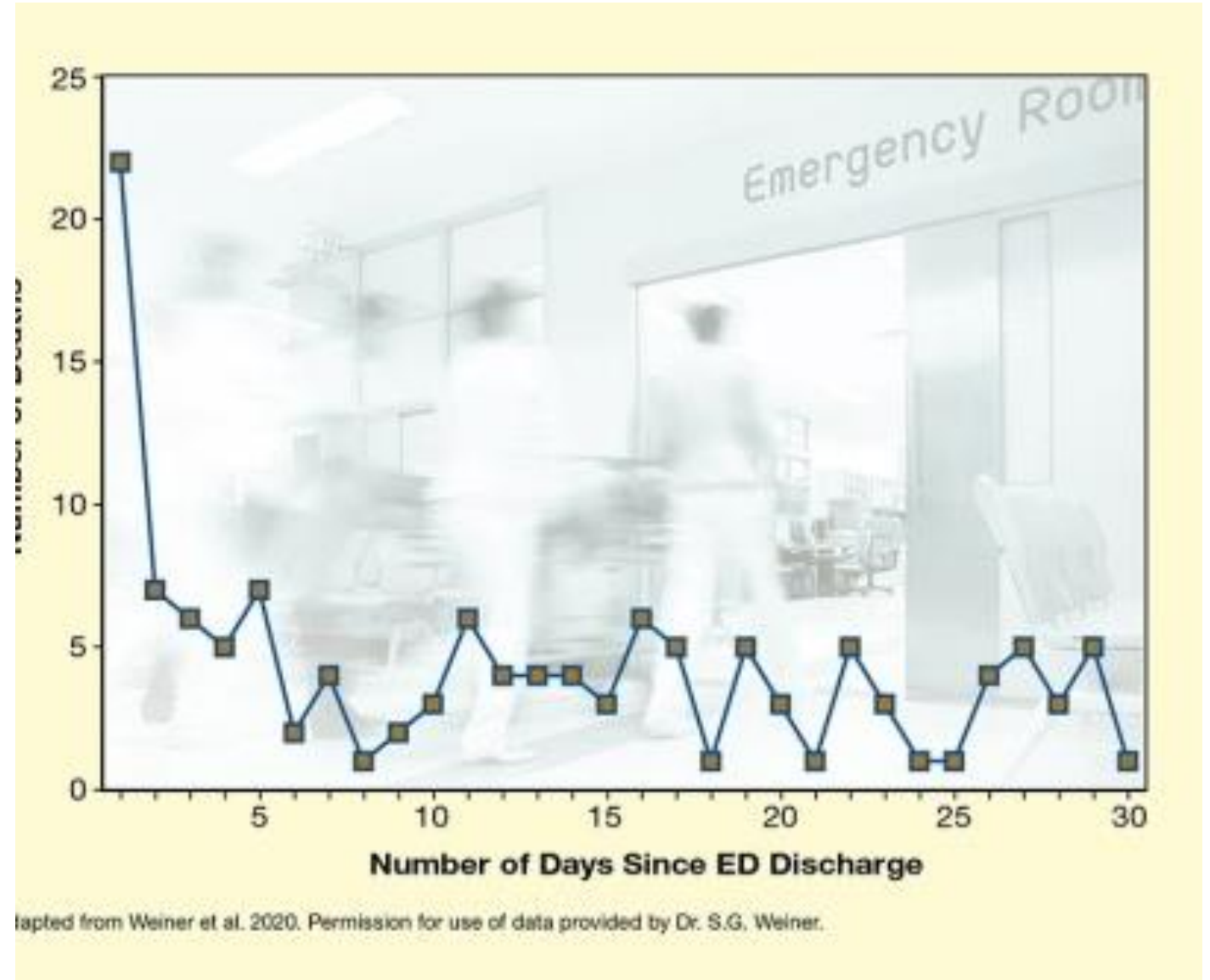
Overdose in the Emergency Department

- Individuals with SUD frequently utilize Emergency Departments
- Mainly because they lack access to Primary and Specialty Care
 - Including Mental Health and Addiction
- Represent an access point into possible treatment



Overdose in the Emergency Department

- Approximately 1 in 20 patients seen in the ED for a non-fatal ED die within 1 year
- Many within 48 hours
- 66% from direct consequences of opioid





“On June 20, 1946, the last empress of China died in a prison cell alone, lying in a pool of her own bodily fluids. Outside, an audience of civilians and soldiers gathered to mock Empress Wanrong (婉容) as she shrieked for opium, convulsing in withdrawal with fever, nausea, diarrhea, and hallucinations”

Opioid Overdose Triad

Triad of symptoms defines the common signs/symptoms of opioid overdose syndrome:

- Altered mental status
- Depressed respirations
- Miotic pupils

This triad has a sensitivity of 92% and a specificity of 76%

Differential:

- Hypoglycemia
- Acidemia
- Complications from end-stage liver disease

Naloxone

- Displaces other opioids bound to mu opioid receptors allowing respiration to take place
- Binds to mu opioid receptors but does not activate the receptors
- Begins working in 1-3 minutes
- Effects last 30-90 minutes in duration
- Not addictive and will not cause overdose
- Can cause withdrawal in some individuals: nausea, vomiting, chills, muscle discomfort, confusion



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Naloxone for Opioid Overdose

- Naloxone blockade is short-lived versus opioid agonist systemic duration
- Monitor short-acting opioid overdose patients for at least 12 hours
- Monitor methadone overdose patients for 24-48 hours
- May not work as well for buprenorphine or fentanyl overdose



Opioid Withdrawal

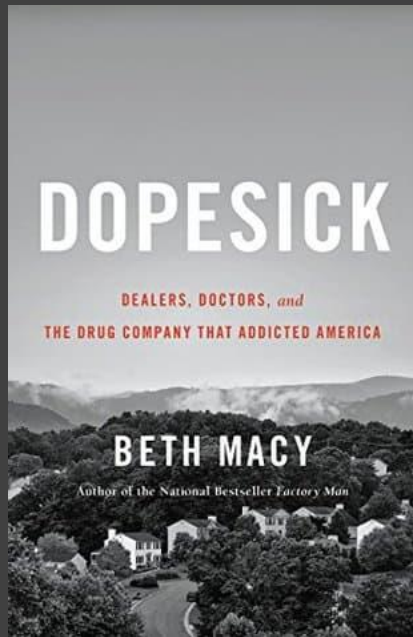
- Results from immediate or rapid cessation of opioids when an individual is physiologically dependent
- CNS depression that occurred during use is replaced with CNS noradrenergic neuron hyperactivity in the locus coeruleus
- Effects can be reversed with clonidine, lofexidine, and opioids



Spontaneous Opioid Withdrawal Timeframes

Drug	Begin Withdrawal	Peak	Lasts
Morphine	6-12 Hours After Last Use	36-72 Hours	Approximately 5 Days
Heroin			
Oxycodone			
Hydrocodone			
Methadone	36-72 Hours After Last Use *May be as short as 20 hours for rapid metabolizers	96-144 Hours	Several Weeks in Duration

Signs/Symptoms of Opioid Withdrawal



- Tachycardia
- Hypertension
- Restlessness
- Irritability
- Insomnia
- Opioid craving
- Pupillary dilation
- Lacrimation
- Rhinorrhea

- Piloerection
- Yawning
- Sneezing
- Mild anorexia
- Nausea
- Vomiting
- Diarrhea
- Muscle cramping/pain
- Anxiety

Clinical Opiate Withdrawal Scale (COWS)

Clinical staff administered tool that evaluates 11 symptoms/signs of opioid withdrawal based on intensity

Pulse rate, sweating, restlessness, pupil size, bone/joint aches, runny nose or tearing, GI upset, tremor yawning, anxiety/irritability, gooseflesh



Evaluates severity withdrawal based on those 11 domains

Score 5-12: mild withdrawal

Score 13-24: moderate withdrawal

Score 25-36 moderately severe withdrawal

Scores greater than 36: severe withdrawal



Why withdrawal?

To Engage in Treatment



Physicians should never promote or allow “cold turkey” withdrawal

Best Withdrawal Management?

- Should strongly consider Buprenorphine
- Calms cravings (adjunct agents won't do that)
- Calms physical withdrawal
- Starts treatment



Conclusion

Opioid overdose represents an important opportunity to save a life

Opioid withdrawal is a high-risk period for death

Physicians have an important role in preventing morbidity and mortality

Questions

Questions?

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