



Sacramento County Opioid Coalition and Bayside Marin present:

# Opioid Addiction as an Attachment Disorder

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# Disclosures

- No conflict of interest

# How did we end up with an epidemic?

- Epidemiology
  - Health policy
  - Bubonic plague
- Opioid vs. opiate
- Is there a flea?
  - Early 2016 – Frontline/Purdue pharma
  - October 2017 – 60 minutes/mid-level distributors

# What opioids look like...



And:

- Needles
- Tin foil
- Lighters
- Plastic pen case or
  - Drinking straw
- Spoons, possibly with burn marks
  - Water bottles
- East of Mississippi, generally powder form



# Facts

- 1990s – APS proposed pain should be the 5th vital sign
- 1991 – 76 million prescriptions
- 1995 – Purdue focus group
- 1996 – OxyContin is launched
- 2001 – JCAHO pain assessment and management standards
- Mid-2000s – Pain management as a specialty
- 2007 – Purdue pleads guilty

# More Facts

- 2008 – 100% of hydrocodone and 81% of oxycodone
- 2010 – Reformulation, ODs rose 37% annually 2010 to 2013
- 2012 – 259 million prescriptions
- 2014 – 94% heroin cheaper and easier to find
  - 80% first misused prescriptions
- 2015 – Prescription revenue \$15,000,000,000.00
  - NFL \$13,000,000,000.00
  - Super bowl ad for OIC/Astra Zeneca –
    - Estimate of 38 million and 80% have OIC

# Add in fentanyl, carfentanyl and gabapentin...



- In 2016 – 46% of fatal overdoses
- Fentanyl – 50-100 times morphine
- Carfentanyl – 100 times fentanyl, 5,000 times heroin and 10,000 times morphine
- Gabapentin misuse and diversion

# Expanding the View

- Staggering numbers
- 2016 – Prince passes and AMA drops pain as 5<sup>th</sup> vital
- 2018 – Squeezing a balloon?
- Linking the two events
- Intuitive appeal
- Problem with the narrative
  - Over-determination
  - Prozac and the medication revolution





# More Expansion

- Depression remains
  - “Chemical imbalance” still a hypothesis
- Multiple aspects of causality
  - Biology reduced
  - Other factors enlarged
- Pill theory/Serotonin, McDonalds and gun laws
- Heroin addiction is over-determined
  - Access to opioids
  - And other factors...

# Socio-historical Events

- Economic decline
  - After WWII – Over 40% of world GNP
  - Until early 1970s – Golden era
  - 1970s – Bretton-Woods, oil crisis and rise of credit cards...
  - 1980s – Less than 20%
  - Middle class shrinking – Less optimism for children

# Socio-historical Events

- Change in strategies
  - 1980s –
    - Dominican drug gangs
  - Purity increases
  - Brand recognition
- Route of administration and demographic
  - Nasal
  - White, middle-class

# Socio-historical Events

- Addiction training in medicine
  - Psychiatric residents
  - Pancreas
- Managed health care
  - Dr. Gingrich
  - Eight minutes per patient
- Medical history
  - Psychogenic patterns, including SUDs
  - Mindbody disorders
- Misdiagnosed, in vogue and wrong treatments available



# Socio-historical Events

- Rise of postmodernism
  - Divorce – 1965 to 1979
  - The age of “everyone gets a prize”
  - Corporate focus on short-term goals
  - Church attendance declining
  - Neighborhood instability
  - Work transience
  - Culture of Amazon, Netflix and dating apps
  - Computers and smart phones
- Chronic stressors, e.g., retirement, traffic, terrorism, global warming



# Socio-historical Events

- A loosening of the center
  - Where do people belong?
  - Lack of meaning and relationships

# Does it fit together?



# The Opioid Proxy

- 1958 – Bowlby publishes first of three articles
- 1978 – Rat Park (Alexander, Coombs, & Hadaway)
- 1978 – Panksepp, Herman, Conner, Bishop, & Scott...
  - Low dose opioids and distress vocalization
    - “There are outward similarities between the dynamics of social attachments and narcotic addiction” p. 608
    - “[A]n animal’s social contacts may chronically activate the brain’s opiate system” (p. 617)
    - “Functionally, administration of morphine to young puppies simulates the presence of the mother” p. 615)



# The Opioid Proxy (continued)

- 1998 – Nelson and Panksepp reviewed the literature...
  - Isolation reduces endogenous opioid levels
  - Social stimuli release opioids
  - Brain Opioid Theory of Social Attachment (BOTSA)
- 1998 – Keverne, Martensz and Tuite...
  - Isolated monkeys and grooming
  - Cerebrospinal fluid
  - Decreased with agonists and increased with antagonists
  - “[O]f considerable significance to human behaviour, considering the increase in both the breakdown of social relationships and opioid abuse in today's society” P. 160



# The Opioid Proxy (continued)

- 2004 – Eisenberger and Lieberman...
  - Animal lesion and human neuroimaging literature
  - Physical and social pain/attachment “borrowed” system
  - In 2005, “Connection is a need as basic as air, water and food...the absence of...causes pain” (p. 101).
  - Separation and rejection
- 2011 – Machin and Dunbar...
  - Limited research on primate social bonds/cognitive and meta-cognitive development
  - More central in primates (including humans)
  - Receptor density/genetic polymorphism
  - Role of touch/Supports BOTSA
    - Mammals when scared (van der Kolk, 2014)

# The Opioid Proxy (continued)

- 2016 – Bershad, Seiden and De wit...
  - Animals, opioids, isolation and play
  - Humans, opioids, negative and positive social events
- 2016 – Heilig, Epstein, Nader and Shaham...OPINION...
  - Social integration
  - Home, work and meaningful relationships
  - A neurobiological intervention
- 2016 – Inagki, Ray, Irwin, Way and Eisenberger...
  - Naltrexone and connectedness
  - Supports BOTSA

# What does this all mean?





# Treatment Basics

- Generally safe, even for long periods.
  - Small percentage with a problem
- Substance use disorders mature out (e.g., Sobell, L. C., Cunningham, J. A., & Sobell, M. B., 1996).
- Severe forms are chronic (Morgen, 2017):
  - Differential diagnosis
  - Professional help
  - Detox is not treatment
  - Level of care adjusts, using ASAM (Mee-Lee, 2013).
  - Length-of-stay issues



# Evidenced Based Practices (EBPs)

- What works is not easy to answer
- SAMHSA on EBPs <https://www.samhsa.gov/ebp-web-guide/substance-abuse-treatment>
- Assumptions of EBPs are not empirically supported (Westen, Novotny & Thompson-Brenner, 2004)
- Empirically Informed Treatments
  - EBPs and EBToC
    - Common factors, e.g., empathy and alliance (Wampold, 2016)



# Harm Reduction

- Without aim to reduce or stop (Denning & Little, 2013)
- Three strategies:
  - Safer drug use (e.g., needle exchanges, OMTs, etc.)
  - Moderation management
  - Abstinence from one but not all
- Some will not engage if abstinence required
  - Criticism of field



# Opioids and Pain

- Physicians and patients bind
- Acute versus chronic pain
- Chronic pain (Dowell, D., Haegerich, T. M., & Chou, R., 2016)\*:
  - Non-pharmacologic and non-opioid
  - Opioids when benefits outweigh risks and with above.
  - Ibuprofen/acetaminophen (Chang, Bijur, Esses, Barnaby & Baer, 2017)
- And if Eisbenberger and Lieberman are right...

\* The CDC guidelines reviewed studies on the effectiveness for different types of pain.





# Medication Assisted Treatments (MATs)

- Abstinence treatments have poor outcomes
- Not a solution, but a tool
- Antagonists, partial agonists, or a combination
- Full agonists, e.g., methadone, and disulfiram, i.e., Antabuse
- Dilemmas for patients include:
  - What constitutes “sobriety”?
  - Acceptance in 12-Step fellowships
  - Physician training and informed consent
  - And...

# Bup/Naloxone

- A high affinity, partial agonist/antagonist
- Doctor's office, high ceiling effect and safe (Walsh, Preston, Bigelow, & Stitzer, 1995)
- Illicit opioid use and treatment retention (Thomas, et al., 2014\*); criminal activities and high risk behaviors (Marsch, 1998)
- Diversion, misuse and substitution (Li, Shorter, & Kosten, 2016); withdrawal syndrome; relapse (Bentzley, Barth, Back & Book, 2015)
- Physician training; psychosocial services; discomfort and a pill (or sublingual film)



\* The studies were short-term and had minimal outcome measures.



# Naltrexone and Vivitrol

- Opioid antagonist
- Does not address withdrawal symptoms
- Highly-motivated
- Vs. Suboxone, abstinence duration and sustained abstinence (Mokri, Chawarski, Taherinakhost & Schottenfeld, 2016)
- Vivitrol as effective (Lee, Nunes, Novo, Bachrach, Bailey, Bhatt & ... Rotrosen, 2018)
  - Up to 30 days
  - Expensive

# Therapy

- Attachment injuries (AAIP research?)
  - Mourning – Loss of a parent
  - Irrational – Abused children
- Existential anxieties/“Adulting”
  - History, guilt and loss of potency
  - Choice and meaning
- Focus on social connections and meaningful activities
  - Exclusion and devaluing /neuroticism
  - Community support options
- Seeking Safety, EMDR, DBT and RO-DBT



# Community Support

- Alcoholics Anonymous and other 12-Step Programs
- Refuge Recovery – Eight-fold path of Buddhism
- SMART Recovery – CBT/motivational methods
- LifeRing – Sobriety, secularity and self-empowerment
- Celebrate – AA Steps and eight principles using Jesus' Beatitudes/not just addiction
- Church or religious affiliation
- And Sober Living Environments (SLEs)...



# Conclusions

- Generally safely, even long-term
- Small percentage with a disorder
  - Some mature out, others have chronic form
  - Retrospective diagnosis
- Opioid addiction is complicated
- **Social environment (e.g., connections and meaning) interacts with brain chemistry**
  - Health seeking paradigm, e.g., BPD vs. Complex PTSD
  - Right idea, wrong solution



# Conclusions

- Treatment:
  - Options and real life
  - Evidence informed practices
  - Harm reduction
  - Chronic pain
  - MATs
  - Talk therapy
  - Community support

# Conclusions

- Epidemic will go away
- Unit of study...
  - Society, schools, home life, etc.?
  - Reread Durkheim (1951)?
- To help prevent/treat...
  - Childrearing
  - Self-care
  - Therapist/physician training
  - Community
- We are a solution





# Thanks and Questions

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