Addiction = Chronic Disease

Joe Sepulveda, M.D., ABPN, ABPM, FAPA, FASAM
Assistant Medical Director, Family Health Centers of San Diego
Medical Director, Substance Use Disorder Services
Medication-Assisted Treatment (MAT) Program
Psychiatric Nurse Practitioner Program
Voluntary Assistant Clinical Professor, UCSD Health Sciences—Dept. of Psychiatry
Diplomate of the American Board of Psychiatry and Neurology
Diplomate of the American Board of Preventive Medicine—Addiction Medicine
Fellow of the American Psychiatric Association
Fellow of the American Society of Addiction Medicine
Agenda

• Stigma vs. Health

• Genetics role in addiction

• Addiction = Chronic Brain Disease

• Addiction is treatable

• Models for treating addiction in Primary Care

• Panel discussion
The Stigma of Addiction

“Addiction is primarily a social problem, not a health problem.”

Reality... Addiction is a Medical Disease
Genetic Heritability

Twin and adoption studies confirm a genetic role

• Account for between $\frac{1}{2}$ and $\frac{3}{4}$ of the risk for addiction.

• Twins (Monozygotic) > Dizygotic

Genetic factors appear to be stronger drivers than environmental factors for initiation of substance use at an early age.
### Genetic Heritability

**“Traditional” Medical Diseases**

- HTN → 0.25 - 0.5
- Diabetes Type 1 → 0.30 to 0.55
- Diabetes Type 2 → 0.80
- Adult-onset Asthma → 0.36 - 0.70

**Substance Use Disorders**

- Heroin → 0.34
- Marijuana → 0.52
- Alcohol → 0.52
- Cigarette → 0.61

*0.0 = genetics are not a contributing factor at all
** 1.0 = genetics are the only factor

Monozygotic > Dizygotic
Addiction = Chronic Brain Disease

1. **Brain diseases** → some form of behavioral expression
   - Alzheimer’s = memory loss
   - Schizophrenia = unusual perceptions of reality and mood changes
   - Opioid addiction = cravings which lead to uncontrollable compulsion

2. Precipitated by fundamental, long-term, changes to the biological structures and functioning of this organ
Addiction and Changes to biological structures
Neurobiology of Addiction

Binge/intoxication
- ventral striatum (VS), including nucleus accumbens
  euphoria, reward
- dorsal striatum (DS)
  habits, perseveration
- globus pallidus (GP)
  habits, perseveration
- thalamus (Thal)
  habits, perseveration

Withdrawal/negative affect
- amygdala (AMG), bed nucleus of the stria terminalis
  (BNST), together also known as the “extended
  amygdala”
  malaise, dysphoria, negative emotional states
- ventral striatum (VS)
  decreased reward

Preoccupation/anticipation
- anterior cingulate (AC)
- prefrontal cortex (mPFC), orbitofrontal cortex (OFC)
  subjective effects of craving, executive function
- basolateral nucleus of the amygdala
  conditioned cues
- hippocampus (Hippo)
  conditioned contextual cues
Addiction can happen to anyone

1. The longer you are prescribed an opioid the greater likelihood you’ll develop addiction.

- Prevalence rates as high as 50% for an opioid use disorder on chronic opioid therapy
- Opioid therapy >90 days at >120 MME = 100x’s as likely to develop OUD
- But this can happen much soon than 90-days
2. ...they chose to try it for the first time = their fault

- Initial voluntary misuse does **NOT** make their condition any less the result of disease

- Addiction = INVOLUNTARY COMPULSIVE USE, cravings **CANNOT** be controlled = Chronic Condition
You relapsed = You’re not serious or committed

Percent of Patients Who Relapse

Drug Addiction: 40 to 60%
Type II Diabetes: 30 to 50%
Hypertension: 50 to 70%
Asthma: 50 to 70%
It takes time for your brain to recover
Selective forgiveness and understanding

3. What other choices lead to chronic disease
   - Diet and Exercise → Diabetes, Hypertension and Congestive Heart Failure to name a few.
Addiction is a treatable disease—Buprenorphine

THM: Buprenorphine for OUD is associated with a 50% or greater reduction in the probability of overdose death.

THM: Buprenorphine at all doses is more effective than placebo in retaining patients in treatment.
Addiction is a treatable disease—Naltrexone

THM: Naltrexone added to standard federal probation lead to 70% less opioid use and 50% less incarceration
THM: Few receive anything that approximates evidence-based care

THM: In contrast, 70%-80% of people with diseases such as HTN and DM receive care
Why Aren’t Physicians Prescribing More Buprenorphine?

Andrew S. Huhn, Ph.D.¹ and Kelly E. Dunn, Ph.D.¹

¹Behavioral Pharmacology Research Unit, Johns Hopkins University School of Medicine, Baltimore MD

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THM: Approx. 48% of X-waivered physicians prescribe on average 5 patients per provider
Starting or Expanding your MAT Services
The clinical champion
Different MAT clinic types

• Integrated Primary Care Clinic
• Integrated Behavioral Health Clinic
• Group MAT Visits
• Dedicated MAT Clinic
• Walk-In Clinic for MAT

Office inductions

Home inductions
MAT expansion models

- Integrated vs. standalone
- OTP hub your site spoke
- Internal hub and spoke
- Each site a hub
- Strategic hubs with surrounding spokes
4. The National Center on Addiction and Substance Abuse. Addiction medicine: closing the gap between science and practice; 2012. 2)
9. National Institute on Drug Abuse Advancing Addiction Science
Panel discussion and the journey to providing MAT services
CommuniCare Health Centers

Christina Andrade-Lemus, MSW, SUDCC III
Program Manager, Outpatient SUD Services and MAT
Established 1972 in Yolo County

Federally Qualified Health Center

Serves 1 in every 8 Yolo County Residents

Primary SUD Provider in the County

In September 2017, began Hub and Spoke Expansion

- Developed a broader safety net (OUD treatable in primary care)
- Expanded number of prescribers (PA’s, NP’s)
- Screening at all points of entry
- Integrated health team, if not, work in collaboration with SUD Treatment Services (patient navigator, case manager, peer support etc.)
- Best case scenario; have Behavioral Health/SUD support
- Flows should be immediately responsive
- Reach out to local hospitals, ED’s to create bridge when not available
Initial Challenges:

• Substance Use Treatment as Part of Health Care

• Approach to Care

• Addressing Stigma

• Hiring the Right Staff

• Finding a Champion

CommuniCare’s Interdisciplinary Team:

Registered Nurse, Peer Support, BH Clinician, Prescribers, MAT Coordinator, SUD Manager