ADDICTION – CHANGING OUR ASPECT OF PRACTICE

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2016 – 899 Oklahomaans died from drug overdose

**Contributions of Selected Causes of Death to the Change in Life Expectancy in the United States, 2000-2015**

- Drug poisoning deaths increased from 47,415 in 2000 to 52,404 in 2015
- Drug poisoning deaths contributed to a loss of .28 years (102 days) in life expectancy
- Drug poisoning deaths due to opioids contributed to a loss of .21 years (76 days) in life expectancy

1. Not comfortable at all – I prefer not to ask my patients about substance use
2. Somewhat comfortable – I have screening tools and use them if the patient brings up the subject
3. Very comfortable – I routinely ask about substance use
4. N/A to my practice
The Myth of Addiction

• “For me the most educational experience of the past three decades was to learn that the traditional image of the addict (weak character, hedonistic, unreliable, depraved, and dangerous) is totally false. This myth, believed by the majority of the medical profession and the general public, has distorted public policy for seventy years.”
  
  - Dr. Vincent P. Dole

Prevalence of Addiction

• 15.9% (40.3 million) with addiction
• More than heart conditions (27.0 million), diabetes (25.8 million), or cancer (19.4 million)
• 22 million with alcohol or drug use disorder

Center for Behavioral Health Statistics and Quality (2015). Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health
2013

24.6 million (9.4%) Americans aged 12 or older had used an illicit drug in the past month.

2002 – 8.3%

Drug use is highest among people in their late teens and twenties
**Opioid Epidemic**

- Rising prevalence of opioid use disorder
- Overdose deaths quadrupled since 1999
- Nearly half of new heroin users report using prescription opioids first
- Report switching to heroin because it’s cheaper and easier to obtain than prescription opioids

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**Past Month and Past Year Heroin Use in Persons Aged 12 or Older**

Alcohol

% of adults aged 18 and over who had at least 1 heavy drinking day in the past year, by sex: US, 1997-2016

DATA SOURCE: NCHS, National Health Interview Survey, 1997-2016, Sample Adult Core Component.
Alcohol

% of adults aged 18 and over who had at least 1 heavy drinking day in the past year, by age group and sex: US, 2016

Mortality

Tobacco/nicotine, alcohol & other drugs:

* Estimated 640,000 deaths each year in US
* Approximately 24% of all deaths in the US

Deaths from MVA – 32,675 (1.2%)
Deaths from Gunshot Wounds – 33,536 (1.3%)

https://www.cdc.gov/nchs/fastats/deaths.htm
For every 1 opioid overdose death in 2010 there were...

- 15 abuse treatment admissions
- 26 emergency room visits
- 115 who abuse/are dependent
- 733 nonmedical users

$4,350,000 in healthcare-related costs

**Cost of Addiction**

 Illegal Drugs: $181 billion/year
   Alcohol: $185 billion/year
   Tobacco: $193 billion/year

**Total: $559 billion/year**

As well as Emotional, Medical, Legal, Personal, Social costs...
**Purdue Pharma**
- Introduced OxyContin in 1995
- Funded > 20,000 pain-related educational programs between 1996 – 2002
- Provided financial backing to:
  - American Pain Society
    - “Pain is the 5th Vital Sign”
  - Joint Commission → accredits healthcare organizations, physicians and patient groups

**Good Intentions Gone Wrong**
- Late 90’s – Physicians were pressured to address “pain as the 5th vital sign”
- Doctors were told:
  - “opioids aren’t addictive”
  - “treating chronic pain long-term with opioids is evidence-based”
  - both **FALSE**
- Some ‘bad apples’ (misprescribing, financial benefits, etc) → minority
- Doctors learn very little about pain management in medical school
- FAR LESS training on addiction
Addiction

80% of young people will experiment with drugs or alcohol

• “The question is frequently asked: Why does a man become a drug addict? The answer is that he usually does not intend to. [The drug] wins by default. I tried it as a matter of curiosity... I ended up hooked. You don’t decide to be an addict. One morning you wake up sick and you’re an addict.”


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Natural History of Opioid Use Disorder

- Euphoria
- Normal
- Withdrawal
- Tolerance & Physical Dependence

Acute Use  Chronic Use
Addiction

- Primary, chronic brain disease characterized by compulsive drug seeking and use despite harmful consequences
- Involves cycles of relapse and remission
- 40-60% genetic
- Without treatment, addiction is progressive and can result in disability or premature death

The 4 C's of Addiction:
- Loss of Control
- Compulsive use or Craving
- Continued use despite adverse Consequences

DSM V Criteria: Substance Use Disorder

- Use in larger amounts or for longer periods of time than intended
- Unsuccessful efforts to cut down or quit
- Excessive time spent using the drug
- Intense desire/urge for drug (craving)
- Failure to fulfill major obligations
- Continued use despite social/interpersonal problems
- Activities/hobbies reduced given use
- Recurrent use in physically hazardous situations
- Recurrent use despite physical or psychological problem caused by or worsened by use
- Tolerance
- Withdrawal

Severity:
- 0-1: No diagnosis
- 2-3: Mild SUD
- 4-5: Moderate SUD
- 6 or more: Severe SUD

Addiction Changes Brain Structure & Function

- Decreased Heart Metabolism in Coronary Artery Disease
- Decreased Brain Metabolism in Addiction

[Images showing healthy and diseased heart and brain with corresponding metabolism levels]
3 Stages of the Addiction Cycle & the Brain Regions Affected

- **Binge/Intoxication**
  - Motivation
  - Reward/Pleasure
  - Dopamine
  - Habits
  - Learning behaviors

- **Withdrawal/Negative Affect**
  - Reactions to stress
  - “fight or flight”
  - Negative emotions (anxiety, irritability)

- **Pre-occupation/Anticipation**
  - “Executive Function”
  - Decision-making
  - Time-Management
  - Organizing thoughts

- **Prefrontal Cortex**
  - Motivation
  - Reward/Pleasure
  - Dopamine
  - Habits
  - Learning behaviors

- **Basal Ganglia**
  - Motivation
  - Reward/Pleasure
  - Dopamine
  - Habits
  - Learning behaviors

- **Extended Amygdala**
  - Reactions to stress
  - “fight or flight”
  - Negative emotions (anxiety, irritability)

Visualizing Recovery

**Brain Recovery with Prolonged Abstinence**

A Treatable Disease

Why is addiction treatment evaluated differently?

They both require ongoing care.

Medication Saves Lives

Detoxification

- Patient is weaned off their dependence on opioids slowly
- Relapse rates post-detox alone are > 90%

NOT TREATMENT
Heroin Overdose Deaths & Opioid Agonist Treatment: Baltimore, MD, 1995-2009

50% reduction in overdose death with opioid agonist treatment


Impact of Buprenorphine in France

79% reduction in overdose death with opioid agonist treatment

**Poor Outcomes Without Maintenance**

**Control group:**
- 0% retained in treatment
- 20% died (N=4)

**Treatment group:**
- Highly significant ASI reduction
- 75% negative tox screens
- 75% retained in treatment
- No deaths

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**Benefits of Methadone Maintenance**

- Reduces risk of HIV by ~6x
- Reduces Hepatitis C & B transmission
- Increases rates of employment
- Reduces criminal activity after 6 months or more of treatment
- Reduces illicit opioid use by 40-70%
- Increases length of life for patients with opioid addiction
- Reduces opioid overdose death rates by 40-60%
Detoxification
- Patient is weaned off their dependence on opioids slowly
- Relapse rates post-detox alone are > 90%

Maintenance
- Indefinite therapy
- 3 aims:
  1. Prevents withdrawal
  2. Keeps patient comfortable by reducing cravings
  3. “Blocks” effects of illicit opioids

Lack of Access to Treatment
- 8% of treatment programs offer methadone or buprenorphine
- 3% of physicians waivered to prescribe buprenorphine
- 2.3 million opioid use disorder, yet maximum opioid-agonist tx slots = 1.4 million
- In rural areas, access is even worse
  - Wait time for methadone maintenance in Vermont and Kentucky is 2 years!

NIDA [http://archives.drugabuse.gov/bupupdate.htm]
How would you characterize your approach to addiction and addiction treatment?

A. Addiction is different from other chronic diseases because people who use drugs or alcohol are making a choice.

B. Patients with addiction have to want to get better so treatment should not be prioritized over treatment for diseases such as diabetes or heart disease.

C. Addiction is a chronic disease with successful outcomes when treatment is patient-centered and similar in approach to diabetes or heart disease care.

D. Addiction is similar to other chronic diseases except using drugs is a crime and should be punished.
Lack of Treatment for Patients with Opioid Use Disorder

- Risk of death waiting for care
  - Comparison of patients accepted into treatment vs. those continuing on a waiting list
  - Risk of death for those on waiting list was 10 times higher than for those who were accepted into care


Medications for Addiction

- “What it comes down to is that we take care of the pharmacological problems, leaving the addict, and everyone else, free to turn his attention to other problems. It does not strike me as relevant whether these patients get off methadone. Some may want to and that’s fine. What is relevant is that a treatment can be developed so that the addict can become a socially useful citizen, happy in himself and in society.”
  - Dr. Marie Nyswander. The New Yorker (1965)
Myths: They’re Still “Addicted”

“But they’re still addicted……”

“That is like saying a diabetic is addicted to insulin… These people are no longer addicts in the sense that an addict is someone involved in the compulsive self-administration of narcotics. They’re being given medicine by a doctor. There is every possibility, from what we know so far, that the pharmacology of a real addict makes it necessary for him to have drugs to function, just as a diabetic requires insulin.”

– Dr. Marie Nyswander. The New Yorker (1965)

Stigma Around Medication

• “But it’s immoral giving somebody drugs…."

• “Tell me, is a molecule of methadone more immoral than a molecule of insulin? Look if you can make it off anything, more power to you. But if you can’t don’t confuse medication with immorality.”

– Dr. Marie Nyswander. The New Yorker (1965)
Evidence and Practice Gap

• “[The] profound gap between the science of addiction and current practice... is a result of decades of marginalizing addiction as a social problem rather than treating it as a medical condition. Much of what passes for “treatment” of addiction bears little resemblance to the treatment of other health conditions.”

Addiction Medicine: Closing the Gap between Science and Practice. www.casacolumbia.org

The Trouble with Tough Love

“...I have never understood the logic of tough love. I took drugs compulsively because I hated myself, because I felt as if no one – not even my family – would love me if they really knew me.

How could being “confronted” about my bad behavior help me with that? Why would being humiliated, once I’d given up the only thing that allowed me to feel safe emotionally, make me better? My problem wasn’t that I needed to be cut down to size; it was that I felt I didn’t measure up.

In fact, fear of cruel treatment kept me from seeking help long after I began to suspect I needed it.”

What if...

• What if we treated other diseases the way we treat addiction?

What if...

• You go to the hospital with chest pain and are found to be having a heart attack
  – Told its “Your Fault” because of your “Choices”
  – Denied treatment because you “did it to yourself”
  – Given a list of cardiologists to call
  – Only given aspirin if you agree to go to counseling
  – Kicked out of the hospital to experience more chest pain
Current Treatment for SUDs

• Everyday experience of patient who seek treatment:
  – Told its "Your Fault" because of your "Choices"
  – Denied treatment because you “did it to yourself”
  – Given a list of addiction treatment centers to call
  – Only given buprenorphine or methadone if you agree to go to counseling
  – Kicked out of the hospital if relapse occurs

What if...

• We treated addiction the way we treat diseases?
**What If...**

- Only prerequisite for treatment is having SUD
- Treatment on demand
- Care triaged based on who needs it the most
- Not fired for having symptoms of their disease (i.e., relapse)
- Encouraged to go on medications
- Offered a menu of treatment options

**Stigma and Addiction**

- Stigma top reason for not accessing treatment
  - 22 million Americans with substance use disorder
  - Only 10% access treatment
- Stigma associated with poor mental and physical health among people who use drugs
- WHO study of 18 most stigmatized social problems in 14 countries:
  - Drug addiction ranked number 1
  - Alcohol addiction ranked number 4
What is Stigma?

- Attribute, behavior, or condition that is socially discrediting
- Two main factors influence stigma:
  - Cause and Controllability
- Stigma decreases when:
  - “It’s not his fault”
  - “She can’t help it”

Despite evidence for genetics and brain changes, stigma is pervasive…

Suffered, Afflicted, Endures, Survivor, Fighter, Victim, Patient
Abuse

Misuse

Abuser

Clean

Dirty

Stop Talking Dirty

• Abuse: “Wicked act or practice, a shameful thing, a violation of decency”
• Associated with behavior such as rape (sexual abuse), domestic violence, and child molestation
• Professionals more likely to view patient as deserving of punishment if described as a “substance abuser”


Types of Stigma for Addiction

- Stigma from within
  - Blame self, feel hopeless
- Stigma from recovery community
  - Medications vs. abstinence
- Stigma from clinicians
  - Belief that treatment is ineffective
- Stigma from outside
  - Choice vs. disease

Impact of Stigma

- Erodes confidence that addiction is a valid and treatable health condition
- Barrier to jobs, housing, relationships, medical care
- Deters public from wanting to pay for treatment, allows insurers to restrict coverage
- Stops people from seeking help
**Break the Silence**

- “There is no simple solution. On the most basic level, stigma prevention involves people speaking out. There is power in people telling their stories. Perceptions can change. Attitudes can shift. Behaviors can be modified. Knowledge can be increased.”

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**Celebrating Any Positive Change**

- “If our goal is to promote health and reclaim lives, then we must understand the direct and sometimes circuitous paths through which individuals and families achieve and sustain such health. We must meet each individual and family with fresh eyes in every encounter with a belief that each encounter is an opportunity for movement, no matter how small, towards health and wholeness.”

  - Arthur C. Evans, Jr., 2013
Take-Home Points

• Addiction is a **chronic medical disease**, a disease of the brain (NOT a sign of moral weakness or failure)
• Most people with addiction, once connected to the appropriate treatment & recovery services, **GET BETTER**
• **Stigma** towards people with addiction acts as a **barrier to care**.
• More addiction prevention and treatment strategies are needed.
• Addiction is costly but preventable.
• **MAT SAVES LIVES.**

Addiction References

• American Society of Addiction Medicine (ASAM)
• Centers for Disease Control and Prevention (CDC)
• Center for Mindfulness, Umass Medical School
• Harm Reduction Coalition (HRC)
• National Institute of Drug Abuse (NIDA)
• Providers’ Clinical Support System for MAT (PCSS-MAT)*
• The National Center on Addiction and Substance Abuse*
• Substance Abuse and Mental Health Service Administration (SAMSHA)
• U.S. Surgeon General’s Report 2016

* Excellent online learning modules, webinars
Project ECHO

Addiction Medicine – Mondays @ 12:00 PM CST